Tank Trailer Storage Area **Start Date** Project: **Boring ID** 68VC610 11/12/96 LEA Comm No: Client: Pratt & Whitney **End Date SA-SB-100** East Hartford, CT Location: 11/12/96 **Drilling Contractor:** LEA Logged By: L. Bianchi Drilling Foreman: Drilling Method: Hand Auger J. Sweeton **Bucket Auger** Drill Rig: Hand Auger Sampling Method: Surface Elevation: **Groundwater Observations:** Depth: NM Northing: Hours Depth: Hours Easting: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Sample No Blows Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1021136 100 0.0 2": Forest litter; 10": Black, fine SAND, some Silt, moist, loose, root fragments, organic layer 1021137 100 0.0 Light yellowish brown, fine SAND, little Silt, moist, loose mottled Bottom of Boring at 2.0' 16 20 RCRA RECORDS CENTER FACILITY Fratt & Whitney - Main St I.D. NO. CTD990672681 FILE LCC. R-5 OTHER RDMS #2534 Boring No: SA-SB-100 Auger hole backfilled upon completion Comments:

Start Date Tank Trailer Storage Area Project: Boring ID 68VC610 11/12/96 LEA Comm No: Client: Pratt & Whitney **End Date SA-SB-101** Location: East Hartford, CT 11/12/96 Logged By: L. Bianchi **Drilling Contractor:** LEA Drilling Foreman: Drilling Method: Hand Auger J. Sweeton Drill Rig: Hand Auger Surface Elevation: Sampling Method: **Bucket Auger Groundwater Observations:** Depth: NM Hours Northing: At: Hours Easting: Depth: At: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Sample No Blows Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 0.0 1021138 100 2": Forest litter; 10" Strong brown, fine SAND, little Silt, moist, loose 1021139 100 0.0 Light brown, fine SAND, little Silt, moist, loose Bottom of Boring at 2' 12 Printed On: 6/17/1998 16 20 24 Boring Auger hole backfilled upon completion. Comments: × ⊙

Location: Drilling C Drilling M Sampling I Groundwa Depth: N Depth:	ontractor: lethod: H Method:	LEA		11/11/1000	102
	IM A	and Auge Bucket A tions: at: at:	er Auger Hours Hours	Logged By: L. Bianchi Drilling Foreman: J. Sweete Drill Rig: Hand Auger Surface Elevation: Northing: Easting:	······································
Elevation/ Depth	Sample No.	Recovery	Blows /6"	Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1021140	100		Strong brown, fine SAND and SILT, moist, loose	3.0
‡	1021141	100		5": As Above; 7": Light greyish brown, fine SAND, trace Silt, moist, loose	0.0
12				Bottom of Boring at 2.0'	
Comment	s: Auger I	hole back	cfilled upon	completion.	

Tank Trailer Storage Area mm No: 68VC610 Start Date Project: **Boring ID** LEA Comm No: 11/12/96 Client: Pratt & Whitney **End Date** SA-SB-103 Location: East Hartford, CT 11/12/96 **Drilling Contractor:** LEA Logged By: L. Bianchi Drilling Foreman: J. Sweeton Drilling Method: Hand Auger Sampling Method: Buck Groundwater Observations: Drill Rig: Hand A Surface Elevation: Hand Auger **Bucket Auger** Depth: NM Hours Northing: Hours Easting: Depth: Sample Description Sample Information Elevation/ Depth Color, Primary Grain Size, Secondary Grain Sizes, Blows Sample No. Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness ō 1021142 1021143 100 100 0.0 Light brown, fine SAND, little Silt, moist, loose As Above Bottom of Boring at 2.0' Printed On: 6/17/1998 16 20 24 Boring Auger hole backfilled upon completion. Comments: × 0:

Project: Tank Trailer Storage Area Start Date **Boring ID** 68VC610 LEA Comm No: 11/12/96 Client: Pratt & Whitney **End Date SA-SB-104** Location: East Hartford, CT 11/12/96 **Drilling Contractor:** LEA Logged By: L. Bianchi Drilling Method: Hand Auger J. Sweeton Drilling Foreman: Sampling Method: **Bucket Auger** Drill Rig: Hand Auger Groundwater Observations: Surface Elevation: Depth: NM **Hours** Northing: At: Easting: Depth: At: Hours Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Sample No. Blows Depth Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1021144 1021145 a 100 0.0 2": Forest litter; 5": Black, fine SAND and SILT, moist, loose, organic matter, root fragments; 5": Olive brown, 100 1021146 0.0 fine SAND, with Silt, trace medium Sand, moist, loose As Above Bottom of Boring at 2.0' Printed On: 6/17/1998 16 20 24 Boring No: SA-SB-104 Comments: Auger hole backfilled upon completion.

Project: Tank Trailer Storage Area Start Date **Boring ID** 68VC610 LEA Comm No: 11/12/96 Client: Pratt & Whitney **End Date SA-SB-105** East Hartford, CT Location: 11/12/96 L. Bianchi **Drilling Contractor:** LEA Logged By: **Drilling Method:** Hand Auger Drilling Foreman: J. Sweeton Sampling Method: **Bucket Auger** Drill Rig: Hand Auger Surface Elevation: **Groundwater Observations:** Depth: NM Hours Northing: Hours Depth: At: Easting: Sample Information Sample Description Elevation/ Depth Color, Primary Grain Size, Secondary Grain Sizes, Blaws Sample No. ecaver (۲) Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1021147 100 0.0 2": Forest litter; 10": Black, fine SAND and SILT, moist, loose, organic matter, root fragments 1021106 100 0.0 2": Brown, fine SAND, with Silt, moist, loose; 10": Greenish grey, SILT and fine SAND, moist, loose, mottled Bottom of Boring at 2.0' 12 Printed On: 6/17/1998 16 20 24 Boring Comments: Auger hole backfilled upon completion. N O



Tank Trailer Storage Area Project: Start Date Boring ID LEA Comm No: 68VC610 11/12/96 Client: Pratt & Whitney **End Date SA-SB-106** Location: East Hartford, CT 11/12/96 Logged By: L. B Drilling Foreman: **Drilling Contractor: LEA** L. Bianchi Drilling Method: Hand Auger J. Sweeton Drill Rig: Hand Auger Sampling Method: **Bucket Auger Groundwater Observations:** Surface Elevation: Northing: Depth: NM At: Hours Hours Depth: At: Easting: Sample Information Sample Description Elevation/ Color, Primary Grain Size, Secondary Grain Sizes, Depth Sample No. Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness ō 1021107 1021108 100 100 2": Forest litter; 10": Black, fine SAND and SILT, moist, loose, root fragments, organic layer
3" Brown, fine SAND, with Silt, moist, loose; 9": Greenish grey, SILT and fine SAND, moist, loose Bottom of Boring at 2.0' 12 16 20 Boring No: SA-SB-106 Comments: Auger hole backfilled upon completion.

Project: Tiedown Area Start Date Boring ID 01/**1**6/97 LEA Comm No: 68V7033 Client: Pratt & Whitney **End Date** SK-SB-107 Location: East Hartford, CT 01/16/97 **Drilling Contractor:** Logged By: D. Brisson Drilling Foreman: Drilling Method: J. Sweeton Geoprobe Sampling Method: Macro Core Drill Rig: Geoprobe 5400 Surface Elevation: Groundwater Observations: Depth: NM At: Hours Northing: Depth: At: Hours Easting: Sample Description Sample Information Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Sample No Blows Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1024987 63 Top 4": Pavement and Traprock; Next 4": Brown, fine to ō very fine SAND, trace(-) Gravel, moist, dense; 3": Orange brown, fine SAND, moist, loose; Bottom 3": Grey brown, fine SAND, trace very fine SAND, moist, dense 1024988 63 0 Top 4": As Above; Bottom 11": Orange brown, fine SAND. trace medium Sand, moist, loose 1024989 63 ō Top 10": As Above; Bottom 5": Grey, fine SAND, little medium Sand, wet, loose 1024990 63 7 As Above 8 1024991 75 10 Top 12": Orange brown-grey, fine SAND, little medium Sand, wet, loose; Bottom 6": Grey, CLAY, trace fine Sand, wet, dense 1024992 75 10 As Above 12 Bottom of Boring at 12' Printed On: 1/22/1998 16 20 24 Boring Borehole backfilled with bentonite chips upon completion. Comments:



Project: Tiedown Area LEA Comm No: 68V7033 Client: Pratt & Whitney Location: East Hartford, CT LEA

Drilling Contractor: Drilling Method: Geopro Sampling Method: Maca Groundwater Observations: Geoprobe Macro Core

Depth: NM

Depth:

At: At: Hours Hours

t Date 01/16/97 End Date 01/16/97

Boring ID

SK-SB-108

Logged By: D. Brisson
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Northing: Easting:

Depui.		14.	пощо	÷ moung.	
	San	ple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
	1024993	63		Top 4": Blacktop & Traprock; Middle 6": Brown, fine to very fine SAND, trace(-) medium Sand, trace organics moist, dense; Bottom 5": Orange brown, fine to very fine SAND, \tautrace(-) medium Sand, moist, dense	0
‡	1024994	63		Top 4": Grey, fine to very fine SAND, moist, dense; Bottom 11": Grey, fine SAND, trace(-) medium Sand, moist, loose	0.0
†4	1024995	75		Top 14": As Above; Bottom 4"; Orange brown, medium to fine SAND, moist, loose	0
†	1024996	75		Top 2": As Above; Middle 3": Grey, fine SAND, trace(-) medium Sand, wet, moderately dense; Bottom 13": Grey, medium to fine SAND, wet, loose	10
-8 -	1024997 1024998	63		As Above	80
†	1024999	63		Top 10": As Above; Bottom 5": Grey, CLAY, trace(-) fine Sand, wet, dense	5
+12				Bottom of Boring at 12'	
16					
-24					
Comments	L			entonite chips upon completion.	

Project: Tiedown Area LEA Comm No: 68V7033 Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA Drilling Method: Geoprobe Sampling Method: Macro Core

Groundwater Observations:

Depth: NM At: Depth: At:

Hours Hours

Start Date 01/16/97 End Date 01/16/97

Boring ID

SK-SB-109

D. Brisson

Logged By: D. B Drilling Foreman: J. Sweeton

Drill Rig: Geoprobe 5400 Surface Elevation:

Northing: Easting:

Deptn:		71:	TOMES	÷ ✓ rasung:		
	San	nple Informa	tion	Sample Description		
Elevation/ Depth	Sample No.	Recovery (%)	Blaws /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
	1025000	63		Top 4": Top Soil; Middle 4": Brown, fine to very fine SAND, trace(-) medium Sand, moist, dense; Bottom 7": Orange brown, fine to very fine SAND, trace medium Sand, moist,	0	
+	1025001	63		dense Grey brown, fine SAND, trace medium Sand, moist, loose, 1/2" Clay lense in bottom of sample	0	
+4	1025002	75		As Above	0	
<u>†</u>	1025003	75		Grey, fine SAND, wet, loose	5	
+8	1025004	76		As Above	40	
	1025005	75		Top 10": As Above; Bottom 8": Grey, CLAY, trace(-) fine Sand, wet, dense	10	
† 12 †				Bottom of Boring at 12'		
16				·		
20						
24						
+	1	1 1			}	

Project: Tiedown Area LEA Comm No: 68V7033 Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA Drilling Method: Sampling Method: Geoprobe Macro Core

Groundwater Observations:
Depth: NM At:

Start Date 01/20/97 **End Date** 01/20/97

Boring ID

SK-SB-110

Logged By: D. Brisson

Drilling Foreman: J. Sweeton

Drill Rig: Geoprobe 5400 Surface Elevation:

Depth: Depth:	NM		At: At:	Hours Hours	Northing: Easting:	
	\neg	San	nple Informat	ion	Sample Description	_
Elevation/ Depth		Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
°		1025010	75		Top 2": Topsoil; Middle 6": Grey brown, fine to medium SAND, trace organics, moist; Bottom 10": Orange brown, fine SAND, trace(-) medium Sand, moist, loose	0
‡		1025011	75		As Above	0
+4		1025012	63		Alternating bands of grey-orange brown, fine SAND, trace medium Sand, moist, loose	5
‡		1025013 1025014	63		Top 4": As Above; Bottom 11": Grey, fine to medium SAND, wet, loose, petroleum odor	30
+8		1025015	63		Top 6": Grey, fine SAND, wet, moderately dense, petroleum odor; Middle 2": Orange, fine SAND, wet, heavy iron staining, moderately dense; Bottom 7": Greenish grey, fine	45
‡ +		1025016	63		SAND, wet, loose Top 6": As Above, grading to medium to fine SAND; Middle 3": Grey, coarse to fine SAND, trace(-) fine Gravel, wet, loose; Bottom 6": Grey, CLAY, trace(-) fine to very fine	40
†12 †					Sand, wet, moist Bottom of Boring at 12'	
+1e	5					
-20						
-24	4				·	

Project: Tiedown Area LEA Comm No: 68V70 Client: Pratt & Whitney 68V7033 Location: East Hartford, CT

Drilling Contractor: LEA Drilling Method: Sampling Method: Geoprobe Macro Core

Groundwater Observations:

Depth: NM Depth:

Hours At: At: Hours

Start Date 01/20/97 End Date 01/20/97

Boring ID SK-SB-111

Logged By: D. Brisson
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Northing: Easting:

Color, Primary Grain Size, Secondary Grain Sizes,	Depth:		At:	Home	Ŧ £asuug:		
Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness (per 1025017) 83 Top 3": Top 501; Bottom 17": Brown, fine SAND, trace organics, moist, loose 1025018 83 Orange brown, fine SAND, trace(-) medium Sand, moist, loose 1025019 63 Top 10": Grey, fine SAND, moist, loose; Bottom 5": Light brown, fine SAND, trace(+) medium Sand, moist, loose 1025020 63 Top 4": As Above; Middle 7": Grey, fine SAND, wet, loose, petroleum odor; Bottom 4": Grey, fine SAND, trace(-) medium Sand, wet, petroleum odor; Middle 2": Orange, fine SAND, heavy iron staining, wet, dense; Bottom 10": Greensh grey, fine SAND, wet, moderately dense 1025022 75 Top 16": As Above; Middle 1": Grey, coarse to fine Sand, trace fine Gravel, wet, loose; Bottom 1": Grey, CLAY, trace fine Sand, wet, dense Bottom 1": Grey, CLA		Sample Information			· · · · · · · · · · · · · · · · · · ·	4	
organics, moist, loose Orange brown, fine SAND, trace(-) medium Sand, moist, loose Top 10": Grey, fine SAND, moist, loose; Bottom 5": Light brown, fine SAND, trace(+) medium Sand, moist, loose 1025020 63 Top 4": As Above; Middle 7": Grey, fine SAND, wet, loose, petroleum odor; Bottom 4": Grey, fine SAND, trace(-) medium Sand, wet, petroleum odor Top 6": As Above, petroleum odor; Middle 2": Orange, fine SAND, heavy iron staining, wet, dense; Bottom 10": Greensh grey, fine SAND, wet, moderately dense 1025022 75 Top 16": As Above; Middle 1": Grey, coarse to fine Sand, trace fine Gravel, wet, loose; Bottom 1": Grey, CLAY, trace fine Sand, wet, dense 12 Bottom of Boring at 13"		Sample No.	Recovery (%)	Blows ~6"	Moisture, Sorting, Sphericity, Angularity,	(ppm)	
loose Top 10": Grey, fine SAND, moist, loose; Bottom 5": Light brown, fine SAND, trace(+) medium Sand, moist, loose Top 4": As Above; Middle 7": Grey, fine SAND, wet, loose, petroleum odor; Bottom 4": Grey, fine SAND, trace(-) medium Sand, wet, petroleum odor Middle 2": Orange, fine SAND, heavy iron staining, wet, dense; Bottom 10": Greensh grey, fine SAND, wet, moderately dense Top 16": As Above; Middle 1": Grey, coarse to fine Sand, trace fine Gravel, wet, loose; Bottom 1": Grey, CLAY, trace fine Sand, wet, dense Bottom of Boring at 13'	0	1025017	83				
brown, fine SAND, trace(+) medium Sand, moist, loose 1025020 63 Top 4": As Above; Middle 7": Grey, fine SAND, wet, loose, petroleum odor; Bottom 4": Grey, fine SAND, trace(-) medium Sand, wet, petroleum odor Top 6": As Above, petroleum odor; Middle 2": Orange, fine SAND, heavy iron staining, wet, dense; Bottom 10": Greensh grey, fine SAND, wet, woderately dense 1025022 75 Top 16": As Above; Middle 1": Grey, coarse to fine Sand, trace fine Gravel, wet, loose; Bottom 1": Grey, CLAY, trace fine Sand, wet, dense 12 As Above Bottom of Boring at 13'	†	1025018	83				
petroleum odor; Bottom 4": Grey, fine SAND, trace(-) medium Sand, wet, petroleum odor Top 6": As Above, petroleum odor; Middle 2": Orange, fine SAND, heavy iron staining, wet, dense; Bottom 10": Greensh grey, fine SAND, wet, moderately dense 1025022 75 Top 16": As Above; Middle 1": Grey, coarse to fine Sand, trace fine Gravel, wet, loose; Bottom 1": Grey, CLAY, trace fine Sand, wet, dense As Above Bottom of Boring at 13'	14	1025019	63				
SAND, heavy iron staining, wet, dense; Bottom 10": Greensh grey, fine SAND, wet, moderately dense 1025022 75 Top 16": As Above; Middle 1": Grey, coarse to fine Sand, trace fine Gravel, wet, loose; Bottom 1": Grey, CLAY, trace fine Sand, wet, dense As Above Bottom of Boring at 13'	<u> </u>	1025020	63		petroleum odor; Bottom 4": Grey, fine SAND, trace(-)		
trace fine Gravel, wet, loose; Bottom 1": Grey, CLAY, trace fine Sand, wet, dense 12 100 As Above Bottom of Boring at 13' 20	+8	1025021	75		SAND, heavy iron staining, wet, dense; Bottom 10":		
Bottom of Boring at 13'	‡	1025022	75		trace fine Gravel, wet, loose; Bottom 1": Grey, CLAY, trace		
16	† 12		100		As Above		
20	† † †				Bottom of Boring at 13'		
	16						
24	20						
+	24				·		
†	†						

Project: Tiedown Area 68V7033 LEA Comm No: Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA Drilling Method: Sampling Method: Geoprobe Macro Core

Groundwater Observations:

Depth: NM

Start Date 01/20/97 **End Date** 01/20/97

Boring ID

SK-SB-112

Logged By: D. Brisson
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Depth: NM		At: At:	Hours	Norming: Easting:	
	Sar	nple Informat	ion	Sample Description	I
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
T °	1025023	83		Top 2": Topsoil; Bottom 18": Brown, fine SAND, trace(-) medium Sand, trace organics, moist, moderately dense	
	1025024	83		Orange brown, fine SAND, trace(-) medium Sand, moist, loose	
#	1025025	63		Top 5": As Above; Bottom 10": Grey brown, fine SAND, trace medium Sand, moist, loose	
† †	1025026	63		Top 10": As Above; Bottom 5": Grey, medium to fine SAND, wet, loose, NO petroleum odor	
+8	1025027	75		Top 8": As Above; Middle 3": Orange, fine SAND, heavy iron staining, wet, dense; Bottom 7": Greenish grey, fine SAND, wet, moderately dense	
12	1025028	75		Top 14": As Above; Middle 1": Grey, coarse to fine SAND, trace fine Gravel, wet, loose; Bottom 2": Grey, CLAY, trace(+) fine Sand, wet, dense	
† ' -				Bottom of Boring at 12'	
16					
+					
+20					
†					
-24					
Comments:	FID M	alfunction	. Borehole	backfilled with bentonite chips upon completion.	

Project: Tiedown Area

Drilling Contractor:

Drilling Method:

Depth: NM

Sampling Method:

LEA Comm No: 68V7033 Client: Pratt & Whitney

Location: East Hartford, CT

Groundwater Observations:

LEA

Macro Core

Hours

Geoprobe

Start Date 01/20/97 **End Date** 01/20/97

Boring ID

SK-SB-113

J. Sweeton

Logged By: D. Brisson Drilling Foreman: J. Drill Rig: Geoprobe 54 Surface Elevation: Geoprobe 5400 Northing:

Depth:	1	At:	Hours	Easting:	
 ·····	San	nple Informat	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
	1025029	42		Top 6": Topsoil - large Cobbles; Bottom 4": Orange brown, fine SAND, large Cobbles in sample, Cobble lodged in tip	
†				No Recovery	
4	1025031	63		Alternating bands of grey-orange brown, fine SAND, moist, loose	
+ + +	1025032	63		Grey, fine SAND, trace medium SAND, wet at Bottom 7", loose, slight petroleum odor on wet material	
+8	1025033	75		Top 10": As Above; Middle 2": Orange, fine SAND, heavy iron staining, dense, wet; Bottom 6": Greenish grey, fine SAND, wet, dense	
‡	1025034	75		Top 12": As Above; Middle 3": Grey, coarse to fine SAND, trace(-) fine Gravel, wet, loose; Bottom 3": Grey, CLAY, trace(-) fine Sand, wet, dense	
+12				Bottom of Boring at 12'	
+16					
<u> </u>					
20					
 				·	
24					
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Project: Tiedown Area **LEA Comm No:** 68V7033 Client: Pratt & Whitney Location: East Hartford, CT Drilling Contractor: Drilling Method: Sampling Method: Geoprobe

Macro Core Groundwater Observations: Depth: NM At:

Hours

tart Date 01/21/97 **End Date** 01/21/97

Boring ID

SK-SB-114

Logged By: D. Brisson

Drilling Foreman: J. Swo Drill Rig: Geoprobe 5400 Surface Elevation: J. Sweeton

Depth:		At:	Hours	Easting:			
	Sar	nple Informat	tion	Sample Description			
Elevation/ Depth	Sample No.	Recovery (火)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)		
10	1025037	63		Top 6": Topsoil; Middle 2": Light brown, medium to fine SAND, moist, loose; Bottom 7": Orange brown, fine SAND, trace organics, moist, moderately dense	O		
T	1025038	63		Orange brown, grading to grey, fine SAND, trace(-) medium Sand, moist, moderately dense	0		
+4	1025039	75		As Above (grey, fine SAND)	2		
† †	1025040 1025041	75		Top 10": As Above; Bottom 8": Grey, fine to medium SAND, trace(+) medium Sand, wet, loose, petroleum odor	10		
+8	1025042	42		Top 7": As Above (no petroleum odor); Bottom 3": Greenish grey, fine SAND, little medium Sand, wet, loose	2		
† †	1025043	42		Top 9": As Above, grading to orange brown; Bottom 1": Grey, CLAY, trace(-) fine Sand, wet, dense	2		
+12				Bottom of Boring at 12'			
Į Į							
+16							
20							
+							
+24							
 							
Commen	ts: Boreh	ole backfi	illed with be	entonite chips upon completion.			

Project: Tiedown Area **Start Date** Boring ID LEA Comm No: 68V7033 01/21/97 Client: Pratt & Whitney
Location: East Hartford, CT **End Date** SK-SB-115 01/21/97 **Drilling Contractor:**

Logged By: D. Brisson
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: Drilling Method: Sampling Method: J. Sweeton Geoprobe Macro Core

Groundwater Observations: Hours ₹ Northing: Depth: NM

Depth: N Depth:		At: At:	Hours Hours	* Northing: ** Easting:	
	San	npie Informat	ion	Sample Description	
Elevation/ Pepth	Sample No.	Recovery (え)	Blaws /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
°	1025044	75		Top 4": Topsoil; Middle 10": Brown, fine SAND, trace(-) medium Sand, trace organics, moist, dense; Bottom 4": Orange brown, fine SAND, moist, moderately dense	0
Ī	1025045	76		As Above	0
-	1025046	75		Top 15": Grey, fine SAND, moist, moderately dense; Bottom 3": Grey, fine SAND, trace(+) medium Sand, moist	2.0
‡	1025047	75		As Above, wet in Bottom 8" of sample, high petroleum odor in wet portion	150.0
+8 +	1025048	63		Top 7": As Above, visible product (clear, shiny) on soil; Bottom 8": Greenish grey, fine SAND, trace(-) medium Sand, wet, moderately dense	700.0
+12	1025049	63		Top 10": As Above; 1": Lens of orange, fine SAND, heavy iron staining; Middle 3": Greenish grey, fine SAND, trace(-) medium Sand, wet, moderately dense; Bottom 1"; Grey, CLAY, trace(-) fine Sand, wet, dense	30.0
‡				Bottom of Boring at 12'	
† †					
16					
†					
1 20					
+					
24			ļ		
Comment	s: Boreho	ole backfil	lled with be	entonite chips upon completion.	

Z.

Tiedown Area Project: **Start Date Boring ID** LEA Comm No: 68V7033 01/21/97 Client: Pratt & Whitney **End Date** SK-SB-116 Location: East Hartford, CT 01/21/97 **Drilling Contractor:** LEA Logged By: D. Brisson Drilling Method: Geoprobe J. Sweeton Drilling Foreman: Drill Rig: Geopre Surface Elevation: Sampling Method: Macro Core Geoprobe 5400 Groundwater Observations: Depth: NM At: Northing: Hours Depth: At: Hours Easting:

Deptil.		11.	110413	Tabiling.	
_	San	nple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
ľ	1025050	83		Top 6": Topsoil; Bottom 14": Brown, fine to very fine SAND, trace organics, moist, dense	0
	1025051	83		Orange brown, fine SAND, trace organics, moist, dense	0
+4	1025052	75		Orange brown, fine to medium SAND, moist, loose	0
† †	1025053	75		Top 10": As Above; Bottom 8": Grey, fine SAND, trace(-) medium Sand, wet, loose, slight petroleum odor	20
+8	1025054	83		Top 10": Grey, fine to medium SAND, wet, loose, petroleum odor; Bottom 10": Orange brown, fine SAND, trace(+) medium Sand, wet, NO petroleum odor	30
+12	1025055	74		Top 15": As Above; Middle 2": Grey, coarse to fine SAND, wet, loose; Bottom 3": Grey, CLAY, trace fine Sand, wet, dense	0
+++++++++++++++++++++++++++++++++++++++				Bottom of Boring at 12.25'	
16					
-20					
24					
Comments	s: Boreho	ole backfi	lled with be	entonite chips upon completion.	

Add. Invest. Fire Trning Area A m No: 68V7037 Project: LEA Comm No: Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: Drilling Method: Sampling Method: LEA Geoprobe Macro Core

Groundwater Observations:

Depth: NM Hours At:

Star Date 1/30/97 End Date 1/30/97

Boring ID

SK-SB-117

Logged By: D. Brisson
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Depth:	1	At:	Hours	Easting:	
	San	nple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
°	1025906	83		Top 6": Topsoil, frozen; Bottom 14": Dark brown, grading to grey brown, fine SAND, trace(-) very fine Sand, trace organics, moist, moderately dense	0
	1025907 1025908	83		Top 10": Grey brown, fine SAND, moist, moderately dense; Bottom 10": Red brown, fine SAND, trace(-) medium Sand, moist, moderately dense	0
	1025909	83		Top 12": Grey, fine SAND, wet, loose; Middle 2": Grey, coarse to fine SAND, wet, loose; Bottom 6": Greenish grey, fine SAND, trace(-) medium Sand, wet, loose	0
‡	1025910	83		Top 18": Greenish grey grading to grey brown, fine SAND, trace(-) medium Sand, wet, moderately dense; Bottom 2": Grey, coarse to fine SAND, wet, loose	0
-8	1025911	83		Top 10": Grey, fine SAND, wet, loose; Bottom 10": Greenish grey, medium to fine SAND, trace(-) coarse Sand, wet, loose	2
† + +12	1025912	83		Top 12": Greenish grey, fine SAND, trace(+) medium Sand, wet, loose; Middle 7": Orange brown, coarse to fine Sand, wet, heavy iron staining, loose; Bottom 1": Grey, CLAY, trace fine Sand, wet, dense	4
<u> </u>				Bottom of boring at 12'	,
+			i		
16					
+ + 20					
24					
Ţ					

Project: Add. Invest. Fire Trning Area A LEA Comm No: 68V7037 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA Drilling Method: Geopro Sampling Method: Macr Groundwater Observations: Depth: NM At: Geoprobe Macro Core

Hours

Start Date 1/30/97 **End Date** 1/30/97

Boring ID

SK-SB-118

Printed

. 0

1/21/1998

N ○:

SK-SB-118

Logged By: D. Brisson

Drilling Foreman: J. Sweeton Drill Rig: Geoprobe 5400 Surface Elevation:

Depth:		kt: Lt:	Hours	Easting:			
	Sam	ple Informat	tion	Sample Description			
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)		
. 0	1025913	92		Top 6": Top soil, frozen; Bottom 16": Dark brown, fine SAND, trace very fine Sand, trace organics, moist, moderately dense	0		
Ť †	1025914	92		Top 8": Dark brown, fine SAND, trace very fine Sand, moist, moderately dense; Bottom 14": Grey brown, fine SAND, trace(-) medium Sand, moist, moderately dense	0		
+4	1025915	83		Top 15": As above; Bottom 5": Orange brown, medium SAND, trace fine Sand, moist, moderately dense	0		
‡	1025916	83		Top 6": As above: Bottom 16": Grey brown, medium SAND, trace fine Sand, some coarse Sand, wet, loose	6.0		
+8 +	1025917	92		Top 8": As above; Bottom 14": Grey brown, fine SAND, some medium Sand, wet, loose	25.0		
‡ ‡	1025918	92		Top 16": Orange brown, medium SAND, trace fine Sand, trace coarse Sand, wet, loose; Bottom 6": Grey, CLAY, trace Silt, wet, dense	11.0		
†12				Bottom of boring at 12'			
. ‡							
16							
 			·				
20							
‡					-		
24							
‡							
Comment	e Porcho	le healdi	led with he	ntonite chips upon completion.			

	JIC DOR	ти О гу	OG .	rage 1 of 1	
LEA Com	ratt & Whit	V7037 Iney	ning Area /	1/30/97 End Date CV_CP_11	
Location: Drilling Co Drilling M Sampling I Groundwa Depth: N Depth:	ontractor: ethod: G Method: ter Observa M	LEA ieoprobe Macro C	Core Hours	Logged By: D. Brisson Drilling Foreman: J. Sweeton Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:	<u> </u>
- · F · - ·		ple Informat	ion	Sample Description	·
Elevation/ Depth	Sample No.	Recovery (X)	Blows 76"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
°	1025919	88		Top 11": Brown, fine SAND, trace medium Sand, trace coarse Gravel, trace organic, frozen; Bottom 10": Brown, fine SAND, trace medium Sand, trace organic, moist,	0
	1025920	88		Top 8": Brown, medium SAND, trace fine Sand, trace coarse Sand, trace coarse Gravel, trace organic, moist, moderate density; Bottom 13": Dark brown, medium SAND,	0
+4	1025921	58		trace fine Sand, trace coarse Sand, trace coarse Gravel, moist, moderate density Top 6": As above; Bottom 8": Blackish brown, fire SAND,	205.0
‡	1025922	58		some medium Sand, trace Silt, trace organic, pieces of wood, wet, moderately dense Top 8": As above; Bottom 6": Dark brown, medium SAND,	>100
+8	1025923	50		trace fine Sand, trace Silt, wet, moderate density Orange brown, medium SAND, trace fine Sand, some coarse Sand, trace Gravel, wet, loose	0.5
‡	1025924	50		Brown, medium SAND, trace fine Sand, trace coarse Sand, wet, loose	10.0
+12				Top 10": As above; Bottom 2": Grey, CLAY, trace Silt, wet, dense	,
· †				Bottom of boring at 13'	:
16					
20					
Ţ					

Comments:

Borehole backfilled with bentonite chips upon completion.

Project: Add. Invest. Fire Trning Area A LEA Comm No: 68V7037

Client: Pratt & Whitney East Hartford, CT Location:

Drilling Contractor: LEA Drilling Method: Geoprobe Sampling Method: Macro Core

Groundwater Observations: Depth: NM At:

rt Date 1/31/97 **End Date** 1/31/97

Boring ID

SK-SB-120

Logged By: D. B Drilling Foreman: D. Brisson

J. Sweeton Geoprobe 5400

Drill Rig: Surface Elevation:

Northing:

Depth: Depth:	NM		At: At:	Hours Hours	Northing:		
Elevation/ Depth		Sample Information			Sample Description		
		Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
·	1	1025927	63		Top 10": Dark brown, fine to very fine SAND, trace(-) Silt, trace organics, moist, dense; Bottom 5": Grey brown, fine to very fine SAND, moist, moderately dense	0	
‡		1025928 1025929	63		Top 8": As above; Middle 2": Orange brown, fine SAND, trace(-) very fine SAND, moist, loose; Bottom 5": Orange brown, fine SAND, wet, loose	0	
+4		1025930	75		Top 10": As above; Bottom 8": Grey brown, fine SAND, trace(-) very fine Sand, dense, wet	0	
‡		1025931	75		Top 3": As above; Bottom 15": Greenish grey to grey, fine SAND, trace(+) medium Sand, wet, loose	2.0	
+8		1025932	67		As above	2.0	
12		1025933	80		Top 22": Grey to greenish grey, fine SAND, trace(+) medium Sand, wet, loose; Bottom 2": Grey, CLAY, trace(-) fine Sand, wet, dense		
. ‡					Bottom of boring at 12.5'		
16	3						
-20	,						
+ 24							
‡							
Comme	mtc-	Boroha	ole heates	illed with he	Potonite chine upon completion		

Comments:

Borehole backfilled with bentonite chips upon completion.



Project: Add. Invest. Fire Trning Area A LEA Comm No: 68V7037 art Date **Boring ID** 1/31/97 Client: Pratt & Whitney **End Date** SK-SB-121 Location: East Hartford, CT 1/31/97 LEA **Drilling Contractor:**

Logged By: D. Brisson
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: Drilling Method: Sampling Method: J. Sweeton Geoprobe Macro Core Groundwater Observations:

Depth: NM At: Hours Northing:

Sample No.	nple Informa	tion	Sample Description Color, Primary Grain Size, Secondary Grain Sizes,	
Sample			Colon Primary Crain Siza Casandary Crain Sizas	
140.	Recovery (%)	Blows /6*	Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
1025934	75		Top 4": Topsoil; 2": Pavement; 4": Traprock; Bottom 8": Dark brown to grey brown, fine SAND, trace very fine Sand, moist, dense	0
1025935	75		Top 10": As above; Bottom 8": Orange brown, fine SAND, trace(-) medium Sand, iron staining, wet, loose	0
1025936	63		Top 10": As above: Bottom 5": Greenish grey, fine SAND, wet, loose	0
1025937	63		Top 10": As above; Bottom 5": Grey, fine to medium SAND, trace(-) coarse Sand, wet, loose	1.0
1025938	67		Top 6": Grey, fine SAND, wet, loose; Bottom 14": Grey, fine to medium SAND, wet, loose	0
1025939	67		Top 6": Grey, fine SAND, trace(-) medium Sand, wet, loose; Middle 10": Grey, fine to medium SAND, wet, loose; Bottom 2": Dark grey, fine SAND, wet, loose	0
	1			0
			Bottom of boring at 12.5'	
	1025935 1025936 1025937	1025935 75 1025936 63 1025937 63 1025938 67	1025935 75 1025936 63 1025937 63 1025938 67	Dark brown to grey brown, fine SAND, trace very fine Sand, moist, dense Top 10": As above; Bottom 8": Orange brown, fine SAND, trace(-) medium Sand, iron staining, wet, loose Top 10": As above: Bottom 5": Greenish grey, fine SAND, wet, loose Top 10": As above; Bottom 5": Grey, fine to medium SAND, trace(-) coarse Sand, wet, loose Top 6": Grey, fine SAND, wet, loose; Bottom 14": Grey, fine to medium SAND, wet, loose Top 6": Grey, fine SAND, trace(-) medium Sand, wet, loose;



Sampling Method:

Project: Add. Invest. Fire Trning Area A LEA Comm No: 68V7037 Start Date Client: Pratt & Whitney Location: East Hartford, CT Drilling Contractor: Drilling Method: Geoprobe

Macro Core

1/31/97 **End Date** 1/31/97

Boring ID

SK-SB-122

Logged By: D. Brisson

Drilling Foreman: J. Swo Drill Rig: Geoprobe 5400 Surface Elevation: J. Sweeton

Sampling Me Groundwater	r Observa			Drill Rig: Geoprobe 5400 Surface Elevation:	
Depth: NM Depth:		At: At:	Hours Hours	Northing:	
Deptil.		aple Informa		Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
l° l	1025940	92		Top 6": Process stone, frozen; Bottom 16": Dark reddish brown, fine SAND, trace medium Sand, trace Silt, trace organic, moist, moderately dense	0.0
‡	1025941	92		Dark brown, fine SAND, trace medium Sand, trace Silt, moist, moderate density	0.0
+4	1025942	96		Top 18": Orange brown, fine SAND, some medium Sand, trace Silt, moist, moderate density; Bottom 5": Grey brown, medium SAND, some fine Sand, trace coarse Sand, wet, moderate density	0.0
	1025943	96		Grey brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose	0.0
18	1025944	88		Top 12": Orange brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose; Bottom 9": Orange brown, medium SAND, some fine Sand, trace coarse Sand, wet,	0.0
+ ⊢	1025945	88		\loose	0.0
12				Top 15": Grey brown, medium SAND, trace fine Sand, trace coarse Sand, wet, loose; Bottom 6": Grey, CLAY, trace fine Sand, trace Silt	
20					
24					

LEA Com	Add. Inves m No: 68 ratt & Whit East Hart	V7037 ney	ning Area	Start Date Boring III 02/03/97 End Date 02/03/97 SK-SB-12	N N
Drilling Co Drilling M Sampling I Groundwa Depth: N Depth:	ethod: G Method: ter Observa M	LEA ieoprobe Macro (tions: \t: \t:		Logged By: D. Brisson Drilling Foreman: J. Sweeton Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:	
	San	ple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
°	1205948 1025949	63		Top 8": Orange brown, medium to fine SAND, frozen; Middle 6": Dark brown to grey brown, fine SAND, trace(+) very fine Sand, trace traprock, moist, trace organics, dense;	0.5
	1025960	63		Bottom 1": Grey, fine SAND, trace organics, moderately dense As above	0
+4	1025951	75		Top 4": As above; Middle 10": Grey, fine SAND, with bands of orange brown, fine Sand, wet, moderately dense; Bottom 4": Grey, fine SAND, trace medium Sand, wet, loose	0
† †	1025952	75		Grey to orange brown, fine SAND, trace(+) medium Sand, wet, loose	10
+8	1026953	67		Top 6": Grey, coarse to fine SAND, wet, loose; Middle 4": Grey, fine SAND, wet, loose; Bottom 10": Grey, fine SAND, trace(+) medium Sand, wet, loose	10
† † + 12	1025954	87		Top 4": As above; 10": Greenish grey, fine SAND, trace(-) medium Sand, wet, loose; 5": Orange brown, coarse to fine SAND, heavy iron staining, wet, loose; Bottom 1":	0
T"		100		Grey, CLAY, trace(-) fine Sand, wet, dense	
				As above bottom 1" Bottom of boring at 12.5'	
Comments	s: Boreho	le backfi	lled with be	entonite chips upon completion.	

Project: Add. Invest. Fire Trning Area A 68V7037 LEA Comm No: Client: Pratt & Whitney Location: East Hartford, CT LEA **Drilling Contractor:**

Drilling Method: Sampling Method: Geoprobe Macro Core

Groundwater Observations: Depth: NM At:

Hours ♀

art Date 2/3/97 **End Date** 2/3/97

Boring ID

SK-SB-124

Logged By: D. Bo Drilling Foreman: D. Brisson

J. Sweeton Drill Rig: Geoprobe 5400 Surface Elevation:

Depth:		At: At:	Hours	Northing: Easting:		
	Sau	mple Informa	Information	Sample Description		
Elevation/ Depth	Sample No.	Recovery (え)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
ľ	1025955	58		Top 6": Dark brown, medium SAND, some fine Sand, some coarse Gravel, frozen; Bottom 8": Red brown, medium SAND, some fine Sand, trace coarse Gravel, moist,	0	
1	1025958	58		Top 6": Red brown, medium SAND, some fine Sand, trace coarse Sand, moist, moderately dense; Bottom 8": Brown, fine SAND, trace medium Sand, moist, moderately dense	0	
T *	1025957	92		Top 12": Brown, medium SAND, some fine Sand, moist, moderate density; Bottom 10": Brown, fine SAND, some medium Sand, moist, moderate density	0	
‡	1025958	92		Brown, medium SAND, trace fine Sand, wet, moderate density	10	
+8	1025959	92		Top 11": Brown, medium SAND, trace fine Sand, trace coarse Sand, wet, loose; Bottom 11": Brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose	5	
‡	1025960	92		Top 18": Red brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose; Bottom 4": Grey, CLAY, trace Silt, wet, moderately dense	0	
+12				Bottom of boring at 12.0'		
16						
20						
-24						
Commen	its: Boreh	ole backfi	lled with be	entonite chips upon completion.		

Project: Add. Invest. Fire Trning Area A Boring ID LEA Comm No: 68V7037 2/3/97 Client: Pratt & Whitney ind Date SK-SB-125 Location: East Hartford, CT Logged By: D. Brisson **Drilling Contractor:** J. Sweeton Drilling Foreman: Geoprobe Drilling Method: Sampling Method: Drill Rig: Geoprobe 5400 Macro Core Surface Elevation: **Groundwater Observations:** Depth: NM Northing: Hours At: Depth: At: Hours Easting: Sample Description Sample Information Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Blows Depth Sample No. Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1025961 42 Top 6": Brown, fine to medium SAND, traprock in top 6", frozen, dense; Middle 2": Brown, fine to very fine SAND, trace medium Sand, frozen, dense; Bottom 2": Grey brown, fine SAND, trace organics, moist, loose 1025962 42 As above 1025963 63 Top 10": Grey brown, fine SAND, moist to wet, dense; Bottom 5": Grey, medium to fine SAND, wet, loose 1025964 63 Top 5": As above; Bottom 10": Greenish grey, fine SAND, wet, loose 1025965 83 Grey, fine SAND, little medium Sand, wet, loose 1025966 83 Top 6": Greenish grey, fine to medium SAND, wet, loose; Middle 10": Orange brown, medium to fine SAND, trace coarse Sand, wet, loose; Bottom 4": Grey, CLAY, trace fine 12 Sand, wet, dense Bottom of boring at 12' 16 20 Borehole backfilled with bentonite chips upon completion. Comments:

At:

Add. Invest. Fire Trning Area A Project: art Date **Boring ID** LEA Comm No: 68V7037 Client: Pratt & Whitney 14/97 **End Date** SK-SB-126 Location: East Hartford, CT 2/4/97 LEA Logged By: D. B Drilling Foreman: **Drilling Contractor:** D. Brisson Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting: Drilling Method: Geopro Sampling Method: Macr Groundwater Observations: Geoprobe Macro Core Depth: NM Depth: Hours At:

Hours

nebru:	E	7f:	Hours	Easting:	
	San	ple Informat	ion	Sample Description	
Sievation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1025969	42		Top 3": Pavement; Middle 4": Brown, medium to fine SAND, traprock in sample, frozen; Bottom 3": Dark brown, fine SAND, trace very fine Sand, moist, dense	0
‡	1025970 1025971	42		As above	0
+4	1025972	76		Top 5": Orange, brown, fine SAND, trace(-) medium Sand, moist, loose; Middle 10": Grey, fine SAND, alternating bands of grey and orange brown, very fine Sand, 1/4" wide,	6
‡	1025973	75		wet, moderately dense; Bottom 3": Greenish grey; fine SAND, wet, moderately dense Top 10": As above; Middle 3": Grey, medium to fine SAND,	20
+8	1025974	72		wet, loose; Bottom 5": Grey, fine SAND, wet, loose Orange brown, fine to medium SAND, trace(-) coarse Sand, wet, loose	0
‡	1025975	72		Top 17": Greenish grey, fine SAND, trace(-) medium Sand, wet, loose; Bottom 1": Grey, CLAY, trace(-) fine Sand	0
12		50		As about	
1 1		1		As above Bottom of boring at 12.5'	
.				bottom of boning at 12.5	
1					
+16					
‡					
-20					
‡					
†					
24					
<u>†</u>					
Comments:				entonite chips upon completion.	<u> </u>

GEOLOGIC BORING LOG Page 1 of 1 art Date Project: Add. Invest. Fire Trning Area A Boring ID 44/97 LEA Comm No: 68V7037 Client: Pratt & Whitney En Date SK-SB-127 2/4/97 Location: East Hartford, CT Logged By: D. Brisson **Drilling Contractor:** Drilling Method: Geoprobe Drilling Foreman: J. Sweeton Drill Rig: Geoprobe 5400 **Macro Core** Sampling Method: Surface Elevation: Groundwater Observations: Depth: NM Northing: At: Hours Hours Easting: At: Depth: Sample Description Sample Information Elevation/ Depth Color, Primary Grain Size, Secondary Grain Sizes, Blows Sample No. Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness ٥ 1025976 63 Top 3": Pavement; Middle 5": Traprock and brown, medium to fine SAND, frozen; Bottom 7": Dark brown, fine to very fine SAND, moist, dense 0 1025977 63 Orange brown, fine SAND, trace(-) very fine Sand, moist, moderately dense 1025978 83 70 Top 15": Grey, fine SAND, moist, moderately dense; Bottom 5": Grey, fine to medium SAND, wet, loose, slight petroleum odor 400 1025979 83 As above (slight petroleum odor) 0 1025980 83 Top 15": Grey to orange brown, medium to fine SAND, trace(-) coarse Sand, wet, loose; Bottom 5": Greenish grey, fine SAND, wet, moderately dense 0 1025981 83 Top 10": As above; Middle 6": Alternating bands of grey and orange brown, fine to medium SAND, trace(-) coarse Sand, wet, dense; Bottom 4": Grey, CLAY, trace(-) fine SAND, wet, dense Bottom of boring at 12'

20

Borehole backfilled with bentonite chips upon completion. Comments:

16

Project: Add. Invest. Fire Trning Area A

Boring ID

tart Date

68V7037 LEA Comm No: 2/4/97 Client: Pratt & Whitney d Date SK-SB-128 Location: East Hartford, CT 4/97 **Drilling Contractor:** LEA Logged By: D. Brisson Drilling Method: Drilling Foreman: J. Sweeton Geoprobe Sampling Method: Macro Core Drill Rig: Geoprobe 5400 Surface Elevation: **Groundwater Observations:** Depth: NM At: Hours Northing: Hours Easting: Depth: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Sample No. Blows Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1025982 42 Top 2": Pavement; 2": Red brown, fine SAND, trace organics, frozen; 4": Dark brown, fine to very fine SAND, 7 trace(-) Silt, moist, dense; Bottom 2": Grey brown, fine SAND, trace(-) very fine Sand, moist, dense 1025983 42 0 As above 1025984 75 0 Top 4": Red brown, fine SAND, wet, loose; Bottom 14": Alternating bands of grey and orange brown, fine SAND, wet, moderately dense 75 50 1025985 Grey to orange brown, fine to medium SAND, trace(-) coarse Sand, wet, loose 1025986 100 Top 6": Grey, fine SAND, little medium Sand, wet, loose: 0 Bottom 18": Orange brown (iron staining), fine to medium SAND, trace(-) coarse Sand, wet, loose 1025987 100 Top 20": Grey, fine SAND, trace(+) medium Sand, wet, 0 loose; Middle 2": Grey, coarse to fine SAND, wet, loose; Bottom 2": Grey, CLAY, trace fine Sand, wet, dense Bottom of boring at 12.2' Printed On: 1/21/1998 16 20 24 Borehole backfilled with bentonite chips upon completion. Comments:

Project: Add. Invest. Fire Trning Area A Start Date **Boring ID** LEA Comm No: 68V7037 2/4/97 **End Date** Client: Pratt & Whitney SK-SB-129 Location: East Hartford, CT 2/4/97 Logged By: D. Brisson **Drilling Contractor:** LEA Drilling Foreman: Drilling Method: Geoprobe J. Sweeton Drill Rig: Geoprobe 5400 Macro Core Sampling Method: Surface Elevation: **Groundwater Observations:** Depth: NM Northing: Hours At: Depth: Hours Easting: At: Sample Description Sample Information Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Blows Sample No. Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness Top 2": Pavement; Middle 4": Grey brown, fine to medium 0 1025988 83 SAND, frozen; Bottom 14": Red brown, medium to fine SAND, some coarse Sand and Gravel, moist, loose 1025989 83 0 Grey, fine SAND, trace(-) medium Sand, moist, loose 1025990 76 ō Top 10": Grey, fine SAND, moist, loose; Bottom 8": Orange, brown to grey, fine SAND, trace(+) medium Sand, moist to 1.0 1025991 Orange brown, fine to medium SAND, wet, loose ō 1025992 83 Top 5": Orange brown, fine SAND, wet, loose; Bottom 15": Grey, fine SAND, trace(+) medium Sand, wet, loose ō 1025993 83 Top 10": As above; Middle 9": Greenish grey, fine SAND, wet, loose; Bottom 1": Grey, CLAY, trace(-) fine Sand 12 Bottom of boring at 12.3' 20 Borehole backfilled with bentonite chips upon completion. Comments:

Project: South Klondike Debris Pile Start Date Boring ID LEA Comm No: 68V7038 2/6/97 Client: Pratt & Whitney **End Date** SK-SB-130 Location: East Hartford, CT 2/6/97 **Drilling Contractor:** LEA Logged By: D. Brisson J. Sweeton **Drilling Method:** Geoprobe Drilling Foreman: Sampling Method: Macro Core Drill Rig: Geoprobe 5400 **Groundwater Observations:** Surface Elevation: Depth: NM Northing: How Depth: Easting: Sample Description Sample Information Elevation/ Depth Color, Primary Grain Size, Secondary Grain Sizes, Blows Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness O 1026209 83 Orange brown, fine SAND, trace(+) very fine SAND, moist, moderately dense 1026210 83 Top 18": As above; Bottom 2": Red brown, fine SAND, moist, loose 1026211 Orange brown, fine SAND, trace(+) medium Sand, wet on bottom 1' 1026212 83 Top 18": Gray to red brown, fine SAND, some very fine Sand, wet, moderately dense; Bottom 2": Orange brown, fine SAND, wet, loose 8 1026213 83 Top 15": Gray brown, fine SAND, trace(+) very fine Sand, wet, moderately dense; Bottom 5": Orange brown to gray brown, fine SAND, wet, loose 1026214 83 As above 12 1026215 42 Gray, coarse to fine SAND, wet, loose Printed On: 1/23/1998 0 No recovery Bottom of boring at 16' 20 Borehole backfilled with bentonite chips upon completion. Comments:

South Klondike Debris Pile Start Date Project: Boring ID 6/97 LEA Comm No: 68V7038 Client: Pratt & Whitney Date SK-SB-131 2/0/97 Location: East Hartford, CT **Drilling Contractor:** LEA Logged By: D. Brisson Drilling Foreman: J. Sweeton **Drilling Method:** Geoprobe Drill Rig: Geoprobe 5400 Sampling Method: Macro Core Surface Elevation: Groundwater Observations: Northing: Depth: NM Hours Depth: At: Hours Easting: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Blows Sample Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1026216 1026217 83 Orange brown, fine to very fine SAND, trace Silt, moist, moderately dense 1026218 83 Orange brown to red brown, medium to fine SAND, trace coarse Sand, moist, loose 1026219 83 Top 10": As above, Bottom 10": Red brown to orange brown, fine to very fine SAND, moist to wet 1026220 83 Top 16": As above bottom 10"; Bottom 4": Orange brown, fine SAND, little medium Sand, wet, loose 1026221 83 Orange brown to red brown, fine SAND, little very fine Sand, wet, moderately dense 1026222 83 As above 12 1026223 83 Gray brown, fine to medium SAND, trace(-) coarse Sand, wet, loose Printed On: 1/26/1998 1026224 83 As above 16 Bottom of boring at 16' 20 Boring Borehole backfilled with bentonite chips upon completion. Š Project: Linde Area Add. Inv. UST LEA Comm No: 68V7054 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA Drilling Method: Geoprobe Sampling Method: **Macro Core Groundwater Observations:** Depth: At: Hours

Start Date 03/16/97 End Date 03/26/97

Boring ID

SK-SB-138

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Depth:	I	At:	Hours	Easting:		
	San	nple Informa	ıtion	Sample Description		
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
10	1630860	75		Top 6": Brown, fine SAND, trace organic matter, trace fine to coarse Gravel (process stone), dry, loose; Bottom 12": Reddish brown, medium to fine SAND, little coarse Sand, trace fine Gravel, dry, loose		
‡	1630861			Same as above last 12": moist at 16", Granite Cobble at 3"		
† 4	1630862	83		Top 5": Grey, very fine to fine SAND, moist, loose; Bottom 15": Greyish brown, fine to very fine SAND grading to fine SAND, wet, loose, wet at 8"		
	1630863 1630864			Greyish brown, fine to medium SAND, wet, loose		
8	1630865	67		Yellowish brown, fine to medium SAND, wet, loose		
	1630866			Top 6": Olive grey, fine to medium SAND, wet, loose; Bottom 10": Olive grey, fine SAND, wet, loose		
+ 12	1630867	75		Olive grey, fine to medium SAND, wet, loose		
· ‡	1630868			Top 9": Yellowish brown to grey, medium SAND, trace coarse Sand, wet, loose; Bottom 9": Grey, varved CLAY, wet, loose		
+16				Bottom of Boring at 16'		
20						
-24						
Comment	s: Borina	backfille	d with ben	tonite chips		
	•			•		

LEΔ

Printed On: 2/9/1998

Project: Linde Area Add. Inv. UST LEA Comm No: 68V7054 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA Drilling Method: Geoprobe Sampling Method: Macro Core

Groundwater Observations:

Depth: Hours At: Depth: At: Hours Start Date 03/26/97 **End Date** 03/26/97

Boring ID SK-SB-139

Logged By: J. Trzaski
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation: D. Brisson

Northing: Easting:

Depui:		ALI	Homs	± casung:	
	San	npie Informa	ation	Sample Description	11
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1630869	79		Top 5": Dark brown, fine SAND, trace Silt, trace organic matter, moist, loose; Bottom 14": Reddish brown, medium to fine SAND, trace coarse Sand, trace fine Gravel, dry, loose, Cobble at bottom	
† †	1630870			Top 8": Same as above last 14", dense; Middle 4": Greyish brown, fine SAND, moist, dense; Bottom 7": Same as top 8": dense	
‡	1630871	88		Top 10": Greyish brown, fine to very fine SAND, wet, loose; Bottom 11": Greyish brown, fine SAND, wet, loose, wet at top	
† †	1630872			Greyish brown, fine to medium SAND, wet, loose	
+8	1630873	71		Olive grey, fine to medium SAND, wet, loose	
†	1630874			Top 8": As Above; Bottom 9": Olive grey, fine SAND, wet, loose	
12	1630875	83		Olive grey, fine SAND, little medium Sand, wet, loose	
.	1630876			Grey, varved CLAY, wet, loose	
16				Bottom of Boring at 16'	
20					
+24					
-					
Comments	s: Boring	backfille	ed with ben	tonite chips	

Project: Linde Area Add. Inv. UST LEA Comm No: 68V7054 Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA **Drilling Method: Direct Push** Sampling Method: Macro Core

Groundwater Observations: Depth: 4.2 At: 0

Hours

Start Date 03/27/97 **End Date** 03/27/97

Boring ID

SK-SB-140

F. Postma Logged By:

Drilling Foreman: D. Brisson Drill Rig: Geoprobe 5400 Surface Elevation:

Depth:	-	At:	Hours	Easting:		
	Sar	nple Informa	tion	Sample Description		
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
10	1630885	70		Brownish red, medium SAND, little coarse Sand, trace fine Gravel, little fine Sand, moist, moderately dense	1.1	
‡ ‡	1630886	70		Red, coarse SAND, little fine Gravel, little medium Sand, trace(+) coarse Gravel, dense, moist, rounded clasts	0.4	
+4 <u>ş</u>	1630887	80		Weak red, fine SAND, little medium Sand, loose, moist to wet	0.7	
†	1630888	80		As Above	0.3	
+8	1630889	50		As Above	0.6	
‡	1630890	50		As Above	0.4	
12	1630891	90		As Above	1.7	
· †	1630892	90		Weak reddish grey, SILT, trace(-) fine Sand, some Clay, loose, moist to wet, rhymites (stratified), fine Sand lenses	41	
+16 -				Bottom of Boring at 16'		
20						
Ī				·		
24				·		
<u> </u>						
Comments	s:					

Project: Linde Area Add. Inv. UST LEA Comm No: 68V7054 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA Drilling Method: Sampling Method: **Direct Push Macro Core** Groundwater Observations: Depth: 4.5 At: 0 Hours

Start Date 03/27/97 **End Date** 03/27/97

Boring ID SK-SB-141

Logged By: F. Postma
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation: D. Brisson

Depth:	1	At:	Hours	Easting:		
	San	nple Informa	tion	Sample Description		
Elevation/ Depth	Sample No.	Recovery (2)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
10	1630893	50		Red, medium SAND, little coarse Sand, little fine Gravel, little fine Sand, loose, moist	0.5	
† + +	1630894	50		Red, medium SAND, some fine Sand, trace coarse Sand, loose, moist	1.0	
‡4 Ş	1630895	80		Weak red, fine SAND, little medium Sand, loose, moist to wet, (fine Sandy Silt lense at 4.2-4.3')	1.0	
 	1630896	80		As Above, wet	0.8	
‡8 †	1630897	75		As Above	0.8	
‡ †	1630898	75		As Above	0.4	
†12 †	1630899	80		As Above	0.5	
· †	1630900	80		Top 2": As Above; Bottom 9": Weak reddish grey, SILT, trace fine Sand, some Clay, loose, wet, rhymites (stratified) fine Sand lesnes	55	
+16				Bottom of Boring at 16'		
20						
‡ ‡						
24						
Comments	s:				1	

Project: Linde Area Add. Inv. UST
LEA Comm No: 68V7054
Client: Pratt & Whitney
Location: East Hartford, CT
Drilling Contractor: LEA
Drilling Method: Direct Push
Sampling Method: Macro Core
Groundwater Observations:
Depth: 4 At: 0 Hours

Start Date 03/27/97 End Date 03/27/97

Boring ID

SK-SB-142

Logged By: F. Postma
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:

	At:	Hours	Easting:		
San	nple Informs	ition	Sample Description		
Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
1630901	70		Red to brownish red, medium SAND, some coarse Sand, little fine Sand, trace(+) fine Gravel, moderately dense, moist	0.7	
1630902	70		As Above	1.8	
1630903	100		Weak read, fine SAND, little medium Sand, loose, wet	6.3	
1630904	100		As Above	2.1	
1630905	60		Reddish grey, fine SAND, little medium Sand, loose, wet	1.4	
1630906	60		As Above	1.8	
1630907	90		As Above	2.8	
1630908	90		Pinkish grey, SILT, some Clay, trace fine Sand, loose, wet, rhymites (stratified), fine Sand lenses	42	
			Bottom of Boring at 16'		
		:			
	Sample No. 1630901 1630902 1630903 1630904 1630906	Sample Recovery (2) 1630901 70 1630902 70 1630903 100 1630904 100 1630905 60 1630906 60	Sample Information Sample Recovery Recovery (2) 1630901 70 1630902 70 1630903 100 1630904 100 1630906 60 1630906 60	Sample Information Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness 1630901 70 Red to brownish red, medium SAND, some coarse Sand, little fine Sand, trace(+) fine Gravel, moderately dense, moist 1630902 70 As Above 1630903 100 Weak read, fine SAND, little medium Sand, loose, wet 1630904 100 As Above 1630906 60 Reddish grey, fine SAND, little medium Sand, loose, wet 1630907 90 As Above 1630908 90 Pinkish grey, SILT, some Clay, trace fine Sand, loose, wet, rhymites (stratified), fine Sand lenses	

Project: Linde Area Add. Inv. UST LEA Comm No: 68V7054

Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA **Drilling Method:** Geoprobe Sampling Method: Macro Core

Hours

Hours

Groundwater Observations:

Depth: At: tartyDate 03/31/97 **End Date** 03/31/97

Boring ID

SK-SB-143

Logged By: J. Trzaski

Drilling Foreman: D. Brisson Drill Rig: Geoprobe 5400 Surface Elevation:

Northing: Easting:

Depth:	E	At:	Hours	₹ Easting:		
	San	nple Informat	tion	Sample Description		
Elevation/ Depth	Sample No.	Recovery (2)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm	
0	1630877	62		Light reddish brown, fine to medium SAND, trace coarse Sand, trace fine Gravel, trace organic matter, dry, loose	0	
†	1630930	62		Reddish brown, fine to medium SAND, trace coarse Sand, trace fine Gravel, moist, moderately dense	0.2	
+4	1630931	83		Top 6": Reddish brown, fine SAND, moist, loose; Bottom 14": Greyish brown, fine SAND, trace very fine Sand, wet, loose, wet at 7"	0	
† †	1631038	83		Top 6": Same as above last 14": Bottom 14": Greyish brown, fine to medium SAND, wet, loose	0	
+8	1631039	71		Greyish brown, fine SAND grading to medium to fine SAND, wet, loose	0.2	
† † †	1631040 1631041	71		Top 6": Greyish brown, medium to fine SAND, wet, loose; Bottom 11": Greyish brown to olive grey, fine SAND, wet, loose	1.2	
12	1631042	83		Olive grey, medium to fine SAND, trace coarse Sand, wet, loose	2.0	
‡	1631043	83		Top 4*: As Above; Bottom 16*: Grey, varved CLAY, wet, loose	50.0	
+16	-			Bottom of Boring at 16'		
20						
24						
1						

Comments:

Boring backfilled with bentonite



z

Project: Linde Area Add. Inv. UST LEA Comm No: 68V7054 Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA **Drilling Method:** Geoprobe Macro Core Sampling Method: Groundwater Observations:

Depth: Depth:

At: At: Hours

Hours

tart Date 08/31/97 **End Date** 03/31/97

Boring ID

SK-SB-144

Logged By: J. To Drilling Foreman: Drill Rig: Geopr Surface Elevation: Northing: J. Trzaski reman: D. Brisson Geoprobe 5400

Easting:

Depui:		11:	110012	7 Dasing.	
	San	nple Informat	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm
0	1631044	75		Top 4.5": Concrete; Reddish brown, fine to medium SAND, trace coarse Sand, trace fine and coarse Gravel, dry, moderately dense	0
†	1631045	75		As Above, moist, moderately dense	0
+4	1631046	88		Top 5": Grey, fine to very fine SAND, moist, loose; Bottom 16": Yellowish brown, fine SAND, wet, loose, wet at 6"	0.2
+ + + 8	1631047	88		Top 3": Same as above bottom 16"; Middle 2": Grey, very fine SAND, wet, loose; Next 8": Greyish brown, fine to medium SAND, wet, loose; Bottom 8": Grey, fine to very	0.2
† *	1631048	62		Tine SAND, wet, loose Top 5": Yellowish brown, fine SAND, wet, loose; Bottom 10": Yellowish brown, fine SAND, trace medium Sand, wet, loose	0.2
†	1631049	62		Top 9": Same as above last 10"; Bottom 6": Olive grey, fine SAND, wet, loose	0.4
+12	1631050	75		Top 15": Greyish brown, fine to medium SAND; Bottom 3": Greyish brown, medium to coarse SAND, wet, loose	4.0
†	1631051	75		Grey, varved CLAY, wet, loose	20.
16				Bottom of Boring at 16'	
+	_				
+20					
24					
1					

Project: Linde Add Inv Gas/Chem Bld
LEA Comm No: 68V7052
Client: Pratt & Whitney
Location: East Hartford, CT

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC

Sampling Method: MC Groundwater Observations:

Depth: NM At: Hours
Depth: At: Hours

Star Date 04-02-97 End Date 04-02-97

Boring ID

SK-SB-145

Logged By: J. Klapheke Drilling Foreman: D. Brisson

Drill Rig: GeoProbe Surface Elevation:

Northing: Easting:

Depth:		At:	Hours	₹ Kasting:	
	San	nple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
T°	1630749	43		2": Asphalt, punched, no recovery	2.2
†	1630750			Dark reddish-brown, fine to coarse GRAVEL, some fine to coarse SAND, wet, loose, trace Silt, subrounded	1.8
+4	1630751 1630752 1630753	79		2": Dark yellowish-brown, fine to medium SAND, wet, slightly dense, 2": Dark greenish-brown, fine SAND and SILT, moist, dense; 34": Dark yellowish-brown, fine to coarse SAND, trace fine Gravel, moist to wet, loose	4.0
+ 8	1630754	77		Dark yellowish-brown, fine to medium SAND, wet, loose, coarsening downward to dark yellowish-brown, fine GRAVEL and coarse SAND, wet, loose	1.6
†	1630755				2.0
+12	1630756	100		6": Dark yellowish-brown, fine GRAVEL with fine to coarse Sand, wet, loose; 42": Oliver-grey, CLAY and SILT, trace fine Sand, wet, dense, laminated	2.5
·	1630757			Timo datia, trot, define, tallimated	2.6
16				Bottom of Boring 16'	
20					
-24					
Comment	s: Boring	backfille	d with ben	tonite chips.	

GEOLOG	TC ROK	ING L	OG			<u> </u>	Page 1 of 1	
LEA Com	Linde Add I n No: 68' ratt & White	V7052	Chem Bld		N	Start Date 04-02-97 End Date	Boring II	
	East Hartf					04-02-97	SK-SB-14	16
Drilling Control of the Control of t	ethod: G Method: ter Observat M A	LEA eoProbe MC ions: .t: .t:	Hours Hours	□ □		Logged By: J. I Drilling Foreman: Drill Rig: Geof Surface Elevation Northing: Easting:	robe	
	Sam	ple Informa	tion			Sample Description		
Elevation/ Depth	Sample No.	Recovery (な)	Blows /6"	C	Moisture,	y Grain Size, Secondary G Sorting, Sphericity, Angul Structures, Density, Cohe	arity,	(ppm

	Sample Information	tion	Sample Description	ŀ	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1630758 1630759	67		6": Olive-grey, fine GRAVEL, some fine to coarse Sand, wet, loose; 26": Dark reddish-brown, fine to coarse GRAVEL and fine to coarse SAND, trace Silt, moist to wet, loose, occasional concrete fragments	0.2
- 4	1630760 1630761	83		6": Olive-grey, fine SAND and SILT, moist, dense; 10": Dark yellowish-brown, fine to medium SAND, little Silt, dense, wet; 24": Dark reddish-brown, fine to coarse SAND, little Silt, moist to wet, slightly dense, occasional Silt	1.0
+ + 8	1630762	12		Dark greyish-brown, fine to coarse SAND, trace fine Gravel, wet, loose	
<u> </u>	1630763			Wot, 18686	
+12	1630764 1630765	100		12": Dark yellowish-brown, fine to coarse SAND and fine GRAVEL, wet, loose, grading to dark grey at bottom 2" ±; 36": Olive-grey, CLAY and SILT, trace fine Sand, wet, dense, laminated	
16				Bottom of Boring 16'	
+ 20 + +					
24	s: Boring				

Project: Linde Add Inv Gas/Chem Bld **Start Date Boring ID** 04-03-97 LEA Comm No: 68V7052 Client: Pratt & Whitney **End Date** SK-SB-147 Location: East Hartford, CT 04-03-97 Drilling Contractor: Drilling Method: Sampling Method: Logged By: J. Klaphe Drilling Foreman: Drill Rig: GeoProbe Surface Elevation: J. Klapheke LEA GeoProbe D. Brisson MC Groundwater Observations: ᇴ Depth: NM Hours Northing:

Depth: Depth:	NM		lt: lt:	Hours Hours	Northing: Easting:	
		Sam	pie Informat	ion	Sample Description	
Elevation/ Depth		Sample No.	Recovery (४)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1	630766 630767 630768	77		6": Topsoil; 10": Dark yellowish-brown, fine to medium SAND with Silt, moist, slightly dense, rooted; 21": Dark reddish- brown, fine to coarse GRAVEL with fine to coarse Sand, trace Silt, moist to wet, loose to slightly dense, subrounded Gravel	2.1 1.6
4	1	630769	62		As Above, wet, subangular to subrounded GRAVEL	2.0
† †	1	630770				1.9
8	1	630771	69		10": Dark yellowish-brown, coarse SAND, little fine Gravel, wet, loose; 13": Dark yellowish-brown, fine(+) to medium SAND, wet, loose; 10": Dark yellowish-brown, fine GRAVEL	1.8
+	,	1630772			and coarse SAND, wet, loose	1.8
† 12	2 1	1630773	83		10": As Above; 30": Olive-grey CLAY,some Silt, trace fine Sand, wet, dense, thinly laminated	1.5
· †	1	1630774				1.6
16	s				Bottom of Boring 16'	
- 20)					
- 24	•				·	
Comme	nte•	Boring	hackfiller	1 with hent	tonite chips.	

Project: Linde Add Inv Gas/Chem Bld LEA Comm No: 68V7052 Client: Pratt & Whitney Location: East Hartford, CT Drilling Contractor: Drilling Method: LEA **GeoProbe** Sampling Method: MC Groundwater Observations: Depth: NM At:

Hours

Start Date 04-03-97 **End Date** 04-03-97

Boring ID

SK-SB-148

Logged By: J. Klaph Drilling Foreman: Drill Rig: GeoProbe J. Klapheke D. Brisson

Surface Elevation:

Northing: Easting:

Depth:		At: At:	Hours	Northing: Easting:			
	Sau	mple Informat	ion	Sample Description			
Slevation/ Depth	Sample No.	Recovery (次)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm		
ļ°	1630776	75		6": Topsoil; 30": Dark reddish-brown, fine(+) to coarse GRAVEL with fine to coarse(+) Sand, trace Silt, wet, dense	1.6		
‡	1630777				5.3		
1 4	1630778	94		Olive-grey to dark reddish-brown, fine to coarse SAND, trace Silt, occasional Silt lense, wet, slightly dense, thinly bedded	2.2		
Ŧ	1630779			timity bedded	1.3		
	1630780	77		20": Dark yellowish-brown, fine SAND, wet, slightly dense; 17": Dark yellow-brown, fine to coarse(+) Sand, wet, slightly dense	1.9		
-	1630781			Siightily delise	1.9		
12	1630782	76		10": As Above; 26": Olive-grey, CLAY, some Silt, trace fine	1.2		
‡				Sand, wet, dense			
‡	1630783			•	0.7		
16				Bottom of Boring 16'			
+20							
† † †							
-24							
+							

Start Date Project: Linde Add Inv Gas/Chem Bld **LEA Comm No:** 68V7052 Client: Pratt & Whitney Location: East Hartford, CT

04-03-97 **End Date** 04-03-97

Boring ID

SK-SB-149

Drilling Contractor: Drilling Method: LEA GeoProbe

Sampling Method: MC Groundwater Observations:

Depth: NM At: Hours

Logged By: J. Klapheke Drilling Foreman: D. B Drill Rig: GeoProbe Surface Elevation: Northing: Easting: D. Brisson

Depth:		At:	Hours	Easting:	
	San	ple Inform	ation	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1630784 1630785	75		8": Dark brown, fine to medium SAND, some Silt, wet, rooted; 10": Dark reddish-brown, fine to coarse SAND, some Silt, moist, loose; 18": Dark reddish-brown, fine to coarse(+) GRAVEL with fine to coarse Sand, moist to wet, dense	0.0
+4	1630786	88		8": Dark reddish-brown SILT, with fine Sand, moist, very dense; 12": Grey, fine SAND, wet, slightly dense; 22": Dark reddish-brown, fine to coarse SAND, wet, loose, coarsening	0.0
‡	1630787			downward	0.0
+8	1630788	62		Dark yellowish-brown, fine to coarse SAND, trace Silt, wet, loose	0.0
†	1630789				0.0
+12	1630790	90		12": Dark yellowish-brown, fine to coarse(+) SAND and fine GRAVEL, wet, loose; 31": Olive-grey, CLAY, little Silt, trace fine Sand, wet, dense, thinly laminated	0.4
	1630791				0.0
+ 16 + + + + + +				Bottom of Boring 16'	
20					
24					
Comments	: Borina	backfille	ed with bent	tonite chips.	<u> </u>

Project: Linde Add Inv Gas/Chem Bld LEA Comm No: 68V7052

Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:

Depth: NM Depth:

At: At: Hours

Hours

Start Date 4-03-97 End Date 04-03-97

Boring ID

SK-SB-150

Logged By: J. Klapheke
Drilling Foreman: D. Brisson

Drill Rig: GeoProbe
Surface Elevation:

Northing: Easting:

Depth:		At:	Hours	₹ Easting:				
	San	aple Informa	ition	Sample Description				
Elevation/ Depth	Sample No.	Recovery (2)	Blows /6°	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)			
ľ	1630792	81		Dark yellowish-brown, to dark reddish-brown, fine to coarse SAND, moist to wet, loose to slightly dense	0.0			
	1630793				0.0			
+4	1630794	83		Dark yellowish-brown to dark reddish-brown, fine to coarse SAND, little Silt, wet, slightly dense, slight petrol odor(?)	0.0			
†	1630795			Odol(17	20.6			
+8	1630796	83		Dark yellowish-brown, fine to coarse SAND, some fine Gravel, wet, slightly dense, occasional iron-staining, generally coarsening downward	0.0			
Ŧ 	1630797			generally coarsening downward	0.0			
12	1630798	75		12": Dark yellowish-brown, fine GRAVEL and fine to coarse(+) SAND, wet, loose, generally fining downward; 24": Olive-grey, CLAY, some Silt, trace fine Sand, wet,	0.0			
·	1630799			dense, thinly laminated	0.0			
16				Bottom of Boring 16'				
† †								
+ 								
†								
24								
Ţ								

LΕΔ

Printed Ont 2/9/1998

Project: Linde Add Inv Gas/Chem Bld LEA Comm No: 68V7052

At:

Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:

Depth: NM Depth: OF

Hours

Hours

Start Date 04-03-97 End Date 04-03-97

Boring ID

J. Klapheke

Logged By: J. Klapheke
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:

Northing: Easting:

рерш.				· LABORING.	
	San	nple Informat	ion	Sample Description	1
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
ļ°	1630800	83		Dark reddish-brown, fine(+) to coarse SAND, little Silt, moist to wet, loose	0.0
 	1630801				0.0
+4	1630802	88		6": Dark olive-grey, SILT with fine Sand, moist, very dense; 36": Dark reddish-brown, fine SAND and SILT, trace	0.0
† † †	1630803			medium to coarse Sand, wet, slightly dense, occasional Silt lenses	0.0
+8	1630804	71		Dark yellowish-brown, fine to coarse SAND, wet, slightly dense, approximately 6" corsening down beds	0.0
‡	1630805				0.0
+12					
† '- †	1630806	76		18": Dark yellowish-brown, fine GRAVEL with fine to coarse(+) Sand, wet, loose; 18": Olive-grey, CLAY, some Silt, trace fine Sand, moist, very dense	0.0
	1630807				0.0
16				Bottom of Boring 16'	
20					
24					
Comments			<u> </u>	tonite chips.	

Comments:

Boring backfilled with bentonite chips.



Project: Linde Add Inv Gas/Chem Bld LEA Comm No: 68V7052

Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA **Drilling Method:** GeoProbe Sampling Method: MC Groundwater Observations: Depth: NM At:

tart Date **04-03-97 End Date** 04-03-97

Boring ID SK-SB-152

Logged By: J. Klaph Drilling Foreman: Drill Rig: GeoProbe J. Klapheke D. Brisson

Surface Elevation:

Elevation/	San	ple Informa	tion			
Elevation/				Sample Description		
Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
T°	1630808	71		2": Asphalt; 2": Subbase; 30": Dark reddish-brown, fine(+) to coarse SAND and fine GRAVEL, with Silt, wet, dense	0.0	
† †	1630809		·		0.0	
+4	1630810	75		Dark reddish-brown, fine to coarse GRAVEL with fine to coarse(+) Sand, wet, loose, occasional grey to black lenses, 6" of concrete rubble at 1', strong petrol odor	63.8	
†	1630811				60.6	
+8	1630812	77		18": Grey-brown, fine SAND, trace Silt, wet, slightly dense, slight petrol odor; 19": Dark yellowish-brown, fine to coarse(+) SAND, trace fine Gravel, wet, slightly dense,	0.0	
‡	1630813			occasional iron-staining	0.0	
+12 +	1630814	92		18": Dark yellowish-brown, fine GRAVEL and fine to coarse(+) SAND, wet, loose; 26": Olive-grey, CLAY, little Silt, trace fine Sand, wet, dense	0.0	
	1630815				0.0	
+16 +				Bottom of Boring 16'		
20						
† † †				·		
-24						

Project: Linde Add Inv Gas/Chem Bld **LEA Comm No:** 68V7052 Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA Drilling Method: GeoProbe Sampling Method: MC **Groundwater Observations:**

Depth:

art Date 04-04-97 **End Date** 04-04-97

Boring ID SK-SB-153

J. Klapheke D. Brisson

Logged By: J. K.
Drilling Foreman:
Drill Rig: GeoPr.
Surface Elevation: GeoProbe

Depth:	At:	Hours	Easting:	
	Sample Info	rmation	Sample Description	
Elevation/ Depth Samp No.	le Recover (ک)	-A Bloms	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
16300			4": Concrete - cored; 4": Dark red, coarse GRAVEL, dry, loose; 36": Dark yellow-brown, fine to medium SAND, trace fine Gravel, dry to moist, loose, occasional coal(?) fragments	0.0
4 16300	320 88		Dark reddish-brown, fine to coarse(+) GRAVEL with fine(+) to coarse Sand, little Silt, wet, extremely dense	0.0
1630 1630	321 322			0.0
8 1630	323 83		12": Dark reddish-brown, fine to coarse GRAVEL with fine to coarse Sand, little Silt, wet, slightly dense; 4": Grey,	0.1
1630	824		fine SAND, wet, slightly dense; 24": Dark yellow-brown, fine to coarse SAND, trace fine Gravel, wet, loose, generally coarsens downward	1.0
12			Bottom of Boring 12'	
· [
16				
20				
Ī				
24				
Comments: Bo	ring books	illed with ben	L	L



Project: Linde Add Inv Gas/Chem Bld LEA Comm No: 68V7052

Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA GeoProbe Drilling Method: Sampling Method: MC Groundwater Observations:

Depth:

04-04-97 **End Date** 04-04-97

Boring ID

SK-SB-154

Logged By: J. Klapheke

Drilling Foreman: D. Brisson

Drill Rig: GeoProbe Surface Elevation:

Depth: Depth:		At: At:	Hours Hours	‡	Northing: Easting:		
Elevation/ Depth	San	ition	Sample Description				
	Sample No.	Recovery (%)	Blows /6"		Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
	1630825 1630826	98		COS	Concrete, cored; Brown to dark yellow-brown, fine(+) to arse SAND, trace fine Gravel, moist to wet at base, casional coal (?) fragments, loose	0.0	
4	1630827 1630828	85		Silt	Grey, medium to coarse SAND, wet, loose, occational lenses, 33": Dark reddish-brown, fine to coarse GRAVEL fine to coarse SAND, little Silt, wet, extremely dense, trol odor(?)	0.0	
+8 +	1630829	75		Dar SIL	rk grey to reddish-brown, fine(+) to medium SAND with .T, wet, slightly dense, occasional Silt lenses	0.0	
Į Į	1630830					0.0	
12				Bot	ttom of Boring 12'		
16							
20							
-24							
Comment	m Paris a	hooletii-	d with bent		a china		
Comments	s: Boring	Dackniie	ea with ben	Unite	e cnips.		

Project: Linde Add Inv Gas/Chem Bld 68V7052 LEÀ Comm No: Client: Pratt & Whitney Location: East Hartford, CT LEA **Drilling Contractor:** GeoProbe

Drilling Method: Sampling Method: MC **Groundwater Observations:** Depth: At:

Start Date 04-04-97 End Date 04-04-97

Boring ID SK-SB-155

Logged By: J. Klaph Drilling Foreman: Drill Rig: GeoProbe Surface Elevation: J. Klapheke D. Brisson

Northing: Fasting:

Elevation/ Depth	San	ple Informa	tion	Sample Description	
		1 3			2
	Sample No.	Recovery (な)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
	1630832	100		4": Concrete, cored; Dark brown to dark reddish-brown, fine(+) to coarse SAND and fine to coarse(+) GRAVEL, trace Silt, dry to wet at tip, dense, angular, brick and concrete and asphalt fragments	0.0
† 4	1630834	92		Dark reddish-brown, fine to coarse GRAVEL with fine(+) to coarse SAND, wet, dense, subangular to subrounded	0.0
‡	1630835				0.0
+8	1630836	81		Dark yellow-brown, fine to coarse SAND, trace (-) fine Gravel, wet, loose, occasional Silt lenses, slight petrol odor	0.0
† †	1630837				0.0
+12				Bottom of Boring 12'	
16					
20					
24					
Comment	s: Boring	backfille	d with ben	tonite chips	

Z

Project: Linde Add Inv Gas/Chem Bld **LEA Comm No: 68V7052** Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA Drilling Method: GeoPro Sampling Method: MC Groundwater Observations: **GeoProbe**

t Date 04-08-97 End Date 04-08-97

Boring ID

SK-SB-156

J. Trzaski Logged By: D. Brisson

Drilling Foreman:
Drill Rig: GeoProbe
Surface Elevation:

Depth: Depth:		At: At:	Hours Hours	Northing: Easting:	
	San	ple Informat	tion	Sample Description	<u> </u>
Sevation/ Depth	Sample No.	Recovery (光)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm
0	1631398	67		Top 8": Reddish-brown, fine to medium SAND, trace fine Gravel, dry, loose; Bottom 8": Light yellowish-brown, fine SAND, trace medium Sand, dry, loose	0.6
‡	1631399	67		Same as bottom 8", moist	0.5
+	1631400	71		Top 6": As Above, wet at 6"; Bottom 11": Reddish-brown, medium to fine SAND, trace coarse Sand, trace fine Gravel, moist, medium dense	0.2
†	1631401	71	_	Reddish-brown, fine to medium SAND, little coarse Gravel, trace fine Gravel, moist, medium dense	0.2
+8	1631402	71		Reddish-brown, medium to fine SAND, trace fine Gravel, trace fine Sand, trace coarse Sand, moist, medium dense, slight pine odor	0.1
12	1631404	71		Top 9": As Above, wet; Bottom 8": Greyish-brown, fine to medium SAND, wet, loose, process stone in bottom	0.0
16					
20					
‡ ‡					
+ +24 +					
Comments	: Borina	backfille	d with bent	tonite chips.	上

Boring No: SK-SB-156

Project: Linde Add Inv Gas/Chem Bld LEA Comm No: 68V7052 Client: Pratt & Whitney Location: East Hartford, CT LEA GeoProbe

Drilling Contractor: Drilling Method: Sampling Method: MC Groundwater Observations:

Depth:

At:

rt Date 8-97 End Date 04-08-97

Boring ID

SK-SB-157

Logged By: J. Trzas Drilling Foreman: Drill Rig: GeoProbe J. Trzaski

D. Brisson

Surface Elevation:

Depth:		At:	Hours	₹ Lasting:	
	San	nple Inform:	ition	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
°	1631405	50		Top 5": Black, bituminous asphalt; Bottom 7": Reddish- brown, medium to fine SAND, trace coarse Sand, trace fine Gravel, moist, medium dense	0.0
‡	1631406	50		Same as last 7", COBBLE at 8"	0.0
+4	1631407	92		As Above, COBBLE at 16'	0.0
 	1631408	92		Top 15": As Above, wet at 13"; Bottom 7": Greyish-brown, fine SAND, wet, loose, strong petrol odor in Bottom 7"	8.5
+8	1631409	76		Greyish-brown, fine to very fine SAND, wet, loose	0.0
Į Į	1631410	75		Olive-grey, fine to medium SAND, wet, loose	0.0
12	1631411	100		Top 12": Olive-grey, fine SAND, wet, loose; Bottom 12": Grey, varved CLAY, wet, loose	0.0
·	1631412	100		Same as last 12"	0.0
16				Bottom of Boring 16'	
20					
24					
<u> </u>					
Comments	s: Boring	backfille	d with bent	tonite chips.	



Project: Cryogenics Area Add. Inv. LEA Comm No: 68V7055 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA Drilling Method: GeoProbe

Sampling Method: MC Groundwater Observations: Depth: NM At:

Depth:

At:

Hours Hours

Start Date 04-08-97 **End Date** 04-08-97

Boring ID

SK-SB-158

Logged By: J. Trzaski

Drilling Foreman: D. Brisson

Drill Rig: GeoProbe Surface Elevation:

Northing: Easting:

Depth:		11:	пошъ	₹ rasung:	
	San	nple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6°	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
ļ°	1631413	67		Top 2": Organic debris; Bottom 14": Light yellowish-brown, fine SAND, dry, loose	0.0
 	1631415	67		Top 8": Same as last 14"; Bottom 8": Brown, fine to medium SAND, moist, loose	0.0
4	1631416	83		Top 8": Brown, fine SAND, wet, loose; Bottom 12": Yellowish brown, fine SAND, wet, loose	0.0
	1631417	83		Top 8": Same as last 12": Middle 4", Grey, SILT, wet, moderately dense; Bottom 8": Brown, fine SAND, wet, loose	0.0
+8	1631418	83		Greyish-brown, fine SAND, wet, loose	0.0
† 	1631419	83		Top 5": Greyish-brown, fine to very fine SAND, wet, loose; Bottom 15": Yellowish-brown, medium to fine SAND, wet, loose	0.0
+12	1631420	88		Olive-brown, fine to very fine SAND, wet, loose	0.0
† † †	1631321	88		Top 6": As Above; Middle 7": Yellowish-brown, medium SAND, trace coarse Sand, wet, loose; Bottom 8": Grey, varved CLAY, wet, loose	0.0
+16				Bottom of Boring 16'	
20					
-24					
Comments	: Boring	backfille	d with bent	tonite chips	1

Printed On: 2/9/1998

Cryogenics Area Add. Inv. m No: 68V7055 Project: LEA Comm No: Client: Pratt & Whitney

Hours

Location: East Hartford, CT

Drilling Contractor: LEA **Drilling Method:** GeoProbe Sampling Method: MC Groundwater Observations:

Depth: NM At: **Start Date** 04-08-97 **End Date** 04-08-97

Boring ID SK-SB-159

J. Trzaski

Logged By: J. To Drilling Foreman: D. Brisson

Drill Rig: GeoProbe Surface Elevation:

Depth:	• • • • •		kt:	Hours	Easting:		
Elevation/ Depth		Sam	ple Informa	tion	Sample Description		
		Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
T °		1631422	71		Drilled through 8" Concrete; Top 5": Black, bituminous asphalt; Bottom 12": Yellowish-brown, fine SAND, moist, loose	0.0	
<u> </u>		1631423	71		As Above last 12"	0.0	
+4		1631424	75		As Above, 1/4" Grey, SILT layer at 12", wet at bottom	0.0	
Į Į	-	1631425	75		Greyish-brown, fine SAND, wet, loose	0.0	
‡8 ‡	-	1631426	83		As Above	0.0	
‡ ‡	-	1631427	83		Yellowish-brown, fine to medium SAND, wet, loose	0.0	
12	-	1631428	100	:	Top 4": As Above; Middle 8": Yellowish-brown, fine SAND, wet, loose; Bottom 12": Yellowish-brown, fine to medium SAND, wet, loose	0.0	
† †		1631429	100	_	Top 6": As Above last 1"; Bottom 1.5': Grey, varved CLAY, wet, loose	0.0	
+16 - - - - - - -					Bottom of Boring 16'		
				ļ			
+24							
Commen	ıte:	Boring	hackfille	d with hen	tonite chips		
		Doming	Daukiilie	With Dell			

Project: Cryogenics Area Add. Inv. LEA Comm No: 68V7055 Client: Pratt & Whitney Location: East Hartford, CT

Start Date 04-09-97 **End Date** 04-09-97

Boring ID

SK-SB-160

LEA **Drilling Contractor:**

Drilling Method: GeoProbe Sampling Method: MC Groundwater Observations:

Depth: NM Depth:

At: At:

Hours Hours Logged By: J. Trzas Drilling Foreman: Drill Rig: GeoProbe Surface Elevation: J. Trzaski D. Brisson

Northing: Easting:

Depth:	F	\t:	Hours	₹ Easting:		
	San	ple Informati	on	Sample Description		
Elevation/ Depth	Sample No.	Recovery (2)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm	
ļ°	1631432	83		Top 6": Dark brown, fine SAND, trace Silt, trace organic matter, Clay, loose; Bottom 14": Reddish-brown, fine to medium SAND, trace fine to coarse Gravel, dry, loose	0	
‡	1631433	83		Yellowish-brown, fine SAND, moist, loose	0	
+4	1631435 1631434	83		Greyish-brown, fine SAND, moist, loose	0	
† † †	1631436	83		Top 12": Yellowish-brown, fine SAND; Middle 2": Grey, SILT, moist, loose; Bottom 6": Greyish-brown, fine to medium SAND, wet at bottom	0	
+8	1631437	83		Top 12": Yellowish-brown, fine to medium SAND, wet, loose; Bottom 8": Greyish-brown, fine SAND, wet, loose	0	
‡	1631438	83		Top 4": Same as last 8"; Bottom 16": Greyish-brown to olive-brown, fine to medium SAND, wet, loose	0	
+12	1631439	76	- 47	Olive-brown, fine to very fine SAND, wet, loose	0	
† †	1631440	75		Top 3": As Above; Middle 8": Yellowish-brown, medium to fine SAND, trace(+) coarse Sand, wet, loose; Bottom 7": Grey, varved CLAY, wet, loose	0	
+16 + + +				Bottom of Boring 16'		
20						
†						
24						
Comments	Ba-i	haakfillas	l with hard	tonite chips		

Printed On: 2/9/1998

Drilling Method: Sampling Method:

Project: Cryogenics Area Add. Inv. LEA Comm No: 68V7055 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA

GeoProbe MC

Start Date 04-09-97 **End Date** 04-09-97

Boring ID SK-SB-161

Logged By: J. Trzas Drilling Foreman: Drill Rig: GeoProbe Surface Elevation: J. Trzaski D. Brisson

Groundw Depth:		At:	Hours	Drill Rig: GeoProbe Surface Elevation: Northing: Easting:	
Depth:		At: nple Informa	Hours	Easting: Sample Description	r
Elevation/ Depth	Sample No.	Recovery	Blows /6°	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1631441	62		Top 8": Concrete; Bottom 7": Light brown, fine SAND, dry, loose	0
† †	1631442	62		Yellowish-brown, fine SAND, moist, loose	•
4	1631443	71		Top 14": Greyish-brown, fine to medium SAND, moist; Bottom 3": Greyish-brown, fine SAND, trace very fine Sand, loose, wet at 12"	0
‡	1631444	71		Top 4": As Above last 3"; Middle 3": Grey, SILT, wet, loose; Bottom 10": Greyish-brown, fine SAND, grading to fine to medium Sand, wet, loose	0
+8	1631445	83		Greyish-brown, fine SAND, trace(-) medium Sand, wet, loose	0
† †	1631446	83		Top 10": Greyish-brown, fine SAND, moist, loose; Middle 6": Greyish-brown, fine to medium SAND, wet, loose; Bottom 4": Same as top 10"	0
+12	1631447	79		Top 10": Olive-brown, fine SAND, trace very fine Sand, wet, loose; Bottom 9": Yellowish-brown, fine to medium SAND, wet, loose	0
‡	1631448	79		Top 6": As Above last 9"; Middle 7": Yellowish-brown, medium to fine SAND, trace coarse Sand, wet, loose; Bottom 6": Grey, varved CLAY, wet, loose	0
+16				Bottom of Boring 16'	
20					
24					
Commer	its: Boring	backfille	ed with ben	tonite chips	

Project: Cryogenics Area Add. Inv. **LEA Comm No:** 68V7055 Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA GeoProbe Drilling Method: Sampling Method: MC Groundwater Observations:

Depth: NM

At:

Hours ₹

Start Date 04-09-97 **End Date** 04-09-97

Boring ID SK-SB-162

Logged By: J. Trzaski Drilling Foreman: Drill Rig: GeoProbe D. Brisson

Surface Elevation:

Northing:

Depth:		At:	Hours	Easting:	
	Sau	mple Informa	tion	Sample Description	ſ
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
ļ°	1631449	83		Top 6": Dark brown, fine SAND, some Silt, trace organic matter, dry, loose; Bottom 14": Light brown, fine SAND, trace organic matter, dry, loose	0
‡ ‡	1631450	83		Top 3": As Above last 14"; Middle 3": Grey, SILT, moist, dense; Bottom 14": Yellowish-brown, fine SAND, trace(-) medium Sand, moist, loose	0
+4	1631451	79		Greyish-brown, fine SAND, moist, loose, wet at 10"	0
† + +	1631452	79		Top 6": Yellowish-brown, fine to very fine SAND; Middle 3": Grey, SILT, wet, moderately dense; Bottom 10": Same as top 6"	0
+8	1631453	71		Greyish-brown, fine SAND, wet, loose	0
†	1631454	71		As Above	0
12	1631455	100		Olive-brown, fine to very fine SAND, grading to yellowish-brown, fine to medium Sand, wet, loose	0
† †	1631456	100		Top 14": Yellowish-brown, medium to fine SAND, trace coarse Sand, wet, loose; Bottom 10": Grey, varved CLAY, wet, loose	0
+16 + + + + 20				Bottom of Boring 16'	
- 24					
Commen	ts: Boring) backfille	ed with ben	tonite chips	

100 Northwest Drive, Plainville, Connecticut, 06062, Phone(203)747-6181 FAX (203)747-8822

Groundwater Observations:

Project: Cryogenics Area Add. Inv. LEA Comm No: 68V7055 LEA Comm No: 68V70 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA Drilling Method: GeoProbe Sampling Method: MC

Start Date 04-09-97 **End Date** 04-09-97

Boring ID SK-SB-163

Logged By: J. Trzaski Drilling Foreman:
Drill Rig: GeoProbe
Surface Elevation: D. Brisson

Depth: Depth:		At: At:	Hours Hours	¥ Northing: Easting:	
	San	nple Informat	ion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (な)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
ļ°	1631457	67		Top 2": Organic debris; Next 2": Concrete; Next 2": Dark brown, fine SAND, dry, loose; Next 2": Grey, SILT, dry, loose; Bottom 8": Reddish-brown, fine to medium SAND,	0.1
Ī.	1631458	67		dry, loose Light yellowish-brown, fine SAND, trace(-) medium Sand, loose, moderately dense to 8", loose at bottom	0.4
+4	1631459	92		Greyish-brown, fine SAND, trace medium Sand, moist, loose	0
‡	1631460	92		Top 4": Yellowish-brown, very fine SAND, moist, loose, Middle 3": Grey, SILT, moist, loose; Bottom 15": Greyish-brown, fine SAND, moist, loose, wet at 15"	0.1
+8	1631461	96		Top 7": As Above last 15"; Bottom 15": Greyish-brown, fine to medium SAND, wet, loose	0.6
† † †	1631462	96		Top 10": Greyish-brown, fine SAND, trace very fine Sand; Bottom 13": Yellowish-brown, medium to fine SAND, wet, loose	0.1
†12 †	1631463	71		As Above last 13"	0.1
‡ †	1631464	71		Top 3": As Above; Bottom 14": Grey, varved CLAY, wet, loose	0
+16 + + + + +				Bottom of Boring 16'	
20					
+24					
ommen	its: Boring	backfilled	with bent	onite chips	

Groundwater Observations:

Surface Elevation:

Start Date Project: Cryogenics Area Add. Inv. Boring ID LEA Comm No: 68V7055 04-09-97 Client: Pratt & Whitney **End Date** SK-SB-164 Location: East Hartford, CT 04-09-97 **Drilling Contractor: LEA** Logged By: J. Trzaski Drilling Method: Drilling Foreman: D. Brisson GeoProbe Drill Rig: GeoProbe Sampling Method: MC

Northing: Hours Depth: NM At: Hours Depth: At: Easting: Sample Description Sample Information Elevation/ Depth Color, Primary Grain Size, Secondary Grain Sizes, Sample No. Blows Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 0.1 1631465 67 Drilled through 2": Asphalt, start 6" below grade; Reddish-brown, fine SAND, trace medium Sand, trace fine to coarse Gravel, dry, loose 1631466 67 0.2 Yellowish-brown, fine to very fine SAND, moist, loose; Black-staining first 4" of sample 1631467 71 Ö Yellowish-brown, fine SAND, moist, loose 0.5 1631468 71 Top 2": Yellowish-brown, fine to very fine SAND, moist, loose; Next 3": Grey, SILT, moist, moderately dense; Next 2": Same as top 2": Bottom 10": Greyish-brown, fine SAND, wet, loose 1631469 92 0.2 As Above last 10" 1631470 92 0 As Above; trace medium SAND last 6" 12 0.2 1631471 75 Yellowish-brown, fine to medium SAND, wet, loose 1631472 ō 75 Top 12": Yellowish-brown, medium to fine SAND, wet, loose; Bottom 6": Grey, varved CLAY, wet, loose 16 **Bottom of Boring 16'** 20 24 Boring backfilled with bentonite chips Comments:

Printed On: 2/9/1998

Project: Cryogenics Area Add. Inv.
LEA Comm No: 68V7055
Client: Pratt & Whitney
Location: East Hartford, CT
Drilling Contractor: LEA
Drilling Method: GeoProbe

Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: NM At:

At: Hours At: Hours Start Date 04-09-97 End Date 04-09-97

Boring ID SK-SB-165

Logged By: J. Trzaski
Drilling Foreman: D. Brisson

Drilling Foreman:
Drill Rig: GeoProbe
Surface Elevation:

Northing: Easting:

Depth:	At: Hou			rs ¥ Easting:		
				Sample Description		
Elevation/ Depth	Sample No.	Recevery (%)	Blows /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
T °	1631473	75		Light brown, fine to very fine SAND, dry, loose; Bituminous asphalt throughout	0	
† †	1631474	75		Yellowish-brown, fine SAND, trace very fine Sand, trace Silt, moist, loose; Bituminous asphalt throughout	0	
+4	1631475	83		Top 8": Yellowish-brown, fine SAND, moist, loose; Next 3": Yellowish-brown, very fine SAND, moist, loose; Next 3": Grey, SILT, moist, loose; Bottom 6": Greyish-brown, fine to	0	
Ŧ	1631476	83		Greyish-brown, fine SAND, wet, loose, wet at top	0	
1 8	1631477	58		Yellowish-brown, fine to medium SAND, trace coarse Sand, wet, loose	0	
‡	1631478	58		As Above	0	
†12 †	1631479	83		Yellowish-brown, medium SAND, trace coarse Sand, wet, loose	0	
†	1631480	83		Top 3": As Above; Bottom 14": Grey, varved CLAY, wet, loose	0	
16				Bottom of Boring 16'		
20						
-24						
<u> </u>						
Comment	s: Boring	backfille	d with bent	tonite chips		

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Project: Cryogenics Area Add. Inv. LEA Comm No: 68V7055

Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:

Depth: NM Depth:

At: At: Hours $\frac{T}{2}$

Hours

Start Date 04-09-97 End Date 04-09-97 Boring ID

SK-SB-166

Logged By: J. Klapheke
Drilling Foreman: D. Brisson

Drilling Foreman: I Drill Rig: GeoProbe Surface Elevation:

Northing: Easting:

рерги:		At:	Hours	₹ rasting:	
	San	nple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (2)	Blaws /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1631481	79		Top 4": Black bituminous asphalt; Yellowish-brown, fine to very fine SAND, little Silt, dry, loose, trace organic matter	0
‡	1631482	79		Top 8": As Above, moist; Bottom 11": Dark yellowish- brown, fine SAND, moist, loose	0
+4	1631483	83		Top 10": Greyish-brown, fine SAND, moist, loose; ;Next 5": Grey, SILT, moist, loose; Bottom 5": Greyish-brown, very fine SAND, moist, moderately dense	0
†	1631484	83		Greyish-brown, fine SAND, moist, loose, wet at bottom	0
+8	1631485	83		Top 10": As Above; Bottom 10": Yellowish-brown, fine to medium SAND, wet, loose	
‡	1631486	83	7	Same as last 10"	2.3
12	1631487	100	·	As Above, trace coarse SAND, wet, loose	0
	1631488	100		Grey, varved CLAY, wet, loose	0
1 16					
+ + + + + +				Bottom of Boring 16;	
20					
24					
Comments	: Boring	backfille	d with ben	tonite chips	<u> </u>

Printed On: 2/9/1998

Project: Cryogenics Area Add. Inv. LEA Comm No: 68V7055

Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:

Depth: NM At:
Depth: At:

Start 04-1 End 04-1

Hours ₹

Start Date 04-10-97 End Date 04-10-97

Boring ID

SK-SB-167

Logged By: J. Trzaski

Drilling Foreman: D. Brisson

Drill Rig: GeoProbe Surface Elevation:

Northing: Easting:

Depth:		At:	Hours	₹ Lasting:	
	San	nple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1631490	30		5": Concrete; Dark reddish-brown, fine to medium SAND with Gravel, dry, loose (Gravel stuck in tip)	0.0
+4	1631491	79		Reddish-brown, fine(+) to medium SAND, moist to wet, slightly dense, occasional Silt lense, olive-grey, wet, dense	0.0
<u>†</u>	1631492	79			0.0
+8	1631493	88		Dark yellow-brown to grey, fine to coarse SAND, wet, slightly dense, generally coarsening downward	0.0
† †	1631494 1631495	88			0.6
12	1631496	100		44": Greyish-brown, fine to coarse(+) SAND, some fine Gravel, wet, loose; 4": Olive-grey, CLAY, trace Silt, trace fine Sand, wet, dense	1.0
† †	1631497				0.0
+16 - - - -				Bottom of Boring 16'	
20					
+24					
<u></u>	Davis -	h-01-611-	حجم طونین ام	tonito obine	
Comments	s: Boring	backfille	d with ben	tonite chips	

Project: Cryogenics Area Add. Inv. LEA Comm No: 68V7055

Client: Pratt & Whitney Location: _East Hartford, CT

Drilling Contractor: LEA Drilling Method: GeoProbe

Sampling Method: MC Groundwater Observations:

Depth: NM

At:

Hours

Start Date 04-10-97 **End Date** 04-10-97

Boring ID

SK-SB-168

Logged By: J. T Drilling Foreman: J. Trzaski

D. Brisson

Drill Rig: GeoProbe Surface Elevation:

Depth:		at: \t:	Hours	Fasting:				
	Sample Information			Sample Description				
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)			
0	1631499 1631500	83		6": Concrete; Dark reddish-brown, fine($+$) to medium SAND, little Silt, trace fine Gravel, moist to wet ($2\pm$), slightly dense	0.0			
4	1631501 1631502	77		21": Dark reddish-brown, fine to coarse SAND, wet, slightly dense, trace Silt; 4": Olive-grey, SILT, moist, dense; 12": Dark reddish-brown, fine(+) to medium SAND, trace Silt, wet, slightly dense	0.5			
8	1631503 1631504	85		Grey to dark reddish-brown, fine(+) to medium SAND with Silt, wet, slightly dense, coarsening downward to fine to coarse(+) Sand, little fine Gravel, wet, loose	3.5			
12	1631505 1631508	90		37": Dark yellowish-brown, fine to coarse(+) SAND, trace fine Gravel, wet, slightly dense, coarsening downward to coarse Sand and fine Gravel, wet, loose; 6": Olive-grey, CLAY, trace Silt, trace fine Sand, wet, dense	0.0			
				Bottom of Boring 16'				
Comments:	: Boring	backfille	d with ben	tonite chips				

Project: Cryogenics Area Add. Inv. LEA Comm No: 68V7055

Hours

Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: Drilling Method: Sampling Method: LEA GeoProbe MC **Groundwater Observations:**

Depth: NM At:

Start Date 04-10-97 End Date 04-10-97

Boring ID

SK-SB-169

J. Klapheke

D. Brisson

Logged By: J. Klaph Drilling Foreman: Drill Rig: GeoProbe Surface Elevation:

Northing:

Depth:	A	At:	Hours	₹ Easting:	
	San	nple Inform	ation	Sample Description]
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1631507 1631508	81		6": Concrete and Rubble; Greyish brown to dark yellow-brown, fine SAND with Silt, moist to wet (at 2'±), slightly dense, occasional Silt lenses	17.5
+4	1631509 1631510	75		Grey to dark reddish-brown, fine(+) to medium SAND with Silt, wet, slightly dense	0.5
8	1631511	79		Grey-brown to dark yellow-brown, fine to coarse SAND, trace(-) Silt, wet, loose to slightly dense	0.2
- 12	1631512	100		12": Dark yellow-brown, coarse SAND with fine Gravel, wet, loose; 25": Dark yellowish-brown fine(+) to medium	9.0
+16	1631514			SAND, trace Silt, wet, slightly dense, coarsening downward to dark yellowish-brown coarse Sand and fine Gravel, wet, loose; 11": Olive-grey, CLAY, trace Silt, trace fine Sand, dense, wet Bottom of Boring 16'	0.0
†	٠		-	Bottom of Bonnig To	
20				·	
24					
Comments	: Boring	backfille	ed with ben	tonite chips	



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Project: Cryogenics Area Add. Inv. **LEA Comm No:** 68V7055

Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA **Drilling Method:** GeoProbe Sampling Method: MC Groundwater Observations: Depth: NM At:

Hours

tart Date 4-10-97 **End Date** 04-10-97

Boring ID

SK-SB-170

Logged By: J. Klapheke

Drilling Foreman: D. Brisson

Drill Rig: GeoProbe Surface Elevation:

Depth:	A	At:	Hours	Easting:	
L	San	nple Informa	tion	Sample Description	<u> </u>
Elevation/ Depth	Sample No.	Recovery (な)	Blows /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1631515 1631516	86		6": Concrete and Rubble; 26": Dark reddish-brown, fine SAND with Silt, occasional Silt lense, moist to wet (at 2'±), slightly dense; 10": Dark yellowish-brown, fine to coarse SAND, wet, loose	0.0
+4	1631517	81		Dark brown to grey, fine(+) to medium SAND with Silt, occasional Silt lense, dense, wet	0.0
‡	1631518				0.0
	1631519	79		Grey-brown to dark yellow-brown, fine to coarse SAND, occasional coarse Sand lenses, wet, loose to slightly dense, occasional iron-staining	0.0
†	1631520			occasional non-staining	0.0
12	1631521	100	· · · · · · · · · · · · · · · · · · ·	24": As Above; 24": Olive-grey, CLAY, trace Silt, trace fine Sand, wet, dense, laminated	0.0
‡	1631522				0.0
+16	<u> </u>		<u>.</u>	Bottom of Boring 16'	
†					
20					
. ‡					
-24					
Comments:	Boring	backfille	d with bent	tonite chips	

Project: Cryogenics Area Add. Inv. LEA Comm No: 68V7055
Client: Pratt & Whitney
Location: East Hartford, CT

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC

Groundwater Observations:
Depth: NM At:
Depth: At.

Hours F

Start Date 04-11-97 End Date 04-11-97

Boring ID SK-SB-171

Logged By: J. Trzaski Drilling Foreman: D. Brisson

Drill Rig: GeoProbe Surface Elevation:

Northing:

Depth:	A	\t:	Hours	₹ Easting:		
· · · · · ·	San	nple Informa	ition	Sample Description		
Elevation/ Depth	Sample No.	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm			
°	1631525	85		Top 5": Black, bituminous asphalt; Bottom 16": Light brown, fine SAND, dry 0-10", moist 10-16", loose, bituminous scattered through sample	1.9	
†	1631526	85		Yellowish-brown, fine SAND, trace(-) medium Sand, moist, loose; Greyish-orange modeling at 10-20", trace organic matter, wet at 10"	2.7	
+4	1631527	100		Top 16": Yellowish-brown, fine SAND, trace organic matter, wet, loose; ;Middle 3": Reddish-brown, fine to very fine SAND; Bottom 5": Grey, SILT, wet, loose	0.4	
	1631529 1631528	100		Top 9": Same as middle 3": Middle 10": Greyish-brown, fine SAND, wet, loose; Bottom 5": Yellowish-brown, fine SAND, fine to coarse Sand, varved, wet, loose	1.3	
+8	1631530	75		Yellowish-brown, fine SAND, trace medium Sand, wet, loose	2.9	
‡	1631531	75		As Above	1.5	
12	1631532	88		Top 6": Yellowish-brown, fine to medium SAND, wet, loose; Bottom 15": very fine to fine SAND (yellowish-brown), wet, loose	22.5	
‡ †	1631533	88		Top 8": Yellowish-brown, fine to medium SAND, wet, loose; Bottom 13": Grey, varved CLAY, wet, loose	7.5	
+16 + + + +				Bottom of Boring 16'		
± 20 + 20						
‡.						
24						
Comments	s: Boring	backfille	d with ben	tonite chips	<u> </u>	

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Project: VPSA Storage Area Add. Inv. LEA Comm No: 68V7056 tart Date Boring ID 4/15/97 Client: Pratt & Whitney **End Date** SK-SB-172 Location: East Hartford, CT 04/15/97 LEA J. Trzaski

Drilling Contractor:
Drilling Method:
Sampling Method: Logged By: J. To Drilling Foreman: Geoprobe D. Brisson Macro Core Drill Rig: Geoprobe 5400 Groundwater Observations: Surface Elevation:

Depth: Hours Northing:

Depth:	At: Hours						
	Sar	nple Informs	ation	Sample Description			
Elevation/ Depth	Sample No.	Sample Recovery Blows Moisture, Sorting, Sphericity, Angular		Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)		
,	1632069	83		Top 3": Black bituminous; Bottom 17": Dark brown, fine SAND, trace silt, trace organic matter, dry, loose, black-staining from 3-10", process stone, fine Gravel at	2.4		
	1632068	83		Yellowish brown, fine SAND, trace medium Sand, trace organic matter, moist, loose, trace Silt in top 10"	0.4		
4	1632067	92		Top 17": Yellowish brown, fine to medium SAND, wet, loose; Bottom 5": Grey, fine SAND, little Silt, wet, loose, wet at top	0.2		
†	1632070 1632071	92		Top 10": Greyish brown, fine SAND, wet, loose; Bottom 12": Greyish brown, fine to medium SAND, wet, loose	0.4		
+8	1632072	58		Top 3": As Above last 12"; Bottom 11": Greyish brown, fine to very fine SAND, wet, loose	0.7		
‡	1632073	58		Greyish brown to yellowish brown, fine to medium SAND, wet, loose	0.3		
+12	1632074	67		Yellowish brown, fine to medium SAND, wet, loose	0.7		
† †	1632075	67		Grey, varved CLAY, wet, loose	0.2		
16				Bottom of Boring at 16'			
+ + 20 +							
†							
+24							
Comments	: Boring	backfille	ed with ben	tonite chips			

Project: VPSA Storage Area Add. Inv. 68V7056 LEA Comm No:

Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: Drilling Method: Sampling Method: Geoprobe Macro Core

Groundwater Observations: Depth:

Hours

tart Date 04/15/97 End Date 04/15/97

Boring ID

SK-SB-173

Logged By: J. Trzaski
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation: D. Brisson

Northing:

Depth:	At: Hours			Easting:		
	San	nple Informa	tion	Sample Description		
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
0	1632076	83		Top 10": Black bituminous asphalt, some greyish brown, fine SAND, little process stone, fine Gravel, dry, loose; Bottom 10": Dark brown, fine SAND, trace coarse Silt, little organic matter, black sapric organic matter at 16-20"	0.5	
† †	1632077	83	·	Yellowish brown, fine SAND, trace Silt, moist, loose, wet at bottom	0.6	
+4	1632078	83		Top 14": Yellowish brown, fine to medium SAND, wet, loose; Bottom 6": Yellowish brown, fine to very fine SAND, wet, loose	0.4	
†	1632079	83		Top 5": Grey, very fine SAND, little Silt, wet, loose; Bottom 15": Greyish brown, fine SAND (10") grading to fine to medium Sand (5") wet, loose	1.1	
+8	1632080	75		Brown, fine SAND grading to yellowish fine to medium SAND, wet, loose	0.8	
‡	1632081	75		Top 8": Yellowish brown, fine to medium SAND, wet, loose; Bottom 8": Light olive brown, fine to very fine SAND, wet, loose	0.2	
+ 12	1632082	71		Yellowish brown, medium SAND, wet, loose	0.9	
‡ † †	1632083	71		Top 3": As Above, trace coarse Sand; Bottom 14": Grey, varved CLAY, wet, loose	0.5	
+16				Bottom of Boring at 16'		
20						
‡						
+24						
Comments	s: Boring	backfille	d with bent	l tonite chips	<u>L</u>	
- January 11 M		240111110		rainia amba		

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roject: EA Com	VPSA Stor	age Area V7056	Add. Inv.		Start Date 04/15/97	Boring II)
	ratt & Whit			1	End Date		
ocation:	East Harti				04/15/97	SK-SB-17	4
Depth:	ethod: G Method: ter Observa	At:	Core Hours Hours	₹	Drilling Forema Drill Rig: Geo Surface Elevatio Northing:	probe 5400	
epth:		At:			Easting:		
Clevation/ Depth	Sample No.	Recovery	Blows /6*	Moist	Sample Description mary Grain Size, Secondary (ure, Sorting, Sphericity, Angutary Structures, Density, Col	ularity,	(ppm)
•	1632084	83		SAND and some Middle 8": Dark	ituminous asphalt and grey e process stone, fine Grave s brown, fine SAND	I, dry, loose; Silt; Bottom 6":	0
Ŧ	1632085	83	•	Voose	fine to very fine SAND, tracent		0.1
+4	1632086	100			n, fine SAND, trace mediun		0.5
Ī	1632087	100			SILT with fine Sand, wet, m eyish brown, fine SAND, w		0.1
+8	1632088	75		Greyish brown, SAND, wet, loo	fine to very fine SAND gra	ding to fine	0
‡	1632089	75			brown, fine SAND, wet, love, fine to very fine SAND,		0
12	1632090	75	_	Top 16": Yellov Sand, wet, loos loose	wish brown, medium SAND se; Bottom 2": Grey, varved	, trace coarse I CLAY, wet,	0
‡	1632091	75	-	Same as above	last 2"		0
16				Bottom of Borin	ng at 16'		
20							
† † †							
24							
<u> </u>							
Comments	s: Boring	backfille	d with ben	tonite chips			

Project: VPSA Storage Area Add. Inv. LEA Comm No: 68V7056 Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: Drilling Method: Sampling Method: Geoprobe Macro Core

Groundwater Observations:

Depth: Depth:

At: At:

Hours

Start Date 04/15/97 **End Date** 04/15/97

Boring ID SK-SB-175

Logged By: J. Trzaski
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation: D. Brisson

Northing: Easting:

	San	nple Informa	ition	Sample Description	
Slevation/ Depth	Sample No.	Recovery (2)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
To	1632092	83		4": Concrete cored with Geoprobe; Top 8": Dark brown, fine SAND, little process stone, coarse Gravel, dry, loose; Bottom 12": Strong brown, fine SAND, some Silt, dry,	0.2
. ‡	1632093	83		moderately dense Strong brown, fine SAND grading to yellowish brown, fine to medium SAND, moist, loose, wet at bottom	0.4
+4	1632094	100		Top 19": Yellowish brown, fine to medium SAND (10") grading to fine SAND (9") wet, loose; Bottom 5": Grey, SILT, little fine SAND, wet, moderately dense	0.5
†	1632095	100	<u>,</u>	Greyish brown, fine SAND, trace medium Sand in bottom 6", wet, moderately dense	1.2
+8	1632096	75		Greyish brown, fine to very fine SAND, wet, loose	0.4
† <u>†</u>	1632097	75		Top 6": Greyish brown, fine SAND, wet, loose; Bottom 12": Light olive brown, fine to very fine SAND, wet, loose	1.4
12	1632098	67		Yellowish brown, medium SAND, wet, loose	0
<u> </u>	1632099	67		Grey, varved CLAY, wet, loose	0
+16 + + + +			-	Bottom of Boring at 16'	
20					
24					
<u> </u>					
Comments	: Boring	backfille	d with be	ntonite chips	

Project: VPSA Storage Area Add. Inv. LEA Comm No: 68V7056 **Start Date Boring ID** 04/16/97 Client: Pratt & Whitney **End Date** SK-SB-176 Location: East Hartford, CT 04/16/97 **Drilling Contractor:** LEA Logged By: J. Trzaski Drilling Method: Sampling Method: Geoprobe Drilling Foreman: D. Brisson Drill Rig: Geoprobe 5400 Surface Elevation: Macro Core **Groundwater Observations:** Depth: Depth: At: Hours Northing: Hours Easting: At:

Deptn:		At:	Hours	₹ rasting:	
	San	nple Informa	tion	Sample Description	·
Elevation/ Depth	Sample No.	Recovery (火)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
T°	1632102	100		Top 2": Organic debris; Bottom 22": Brown, fine SAND and SILT, trace organic matter, dry, moderately dense	0
† † †	1632103	100		Top 4": Same as above last 22"; Middle 14": Strong brown, fine SAND and SILT, trace organic matter, moist, loose; Bottom 6": Yellowish brown, fine SAND, moist, loose	0
+4	1632104	92	_	Top 8": Brown, fine to very fine SAND, wet, loose; Middle 6": Grey, SILT and fine SAND, wet, moderately dense; Bottom 8": Same as top 8", wet at top	0.6
†	1632105 1632106	92		Yellowish brown, fine to medium SAND, wet, loose	1.0
 8	1632107	62		As Above	0.7
 - - -	1632109	62		Greyish brown, medium to fine SAND, trace coarse Sand, wet, loose	1.4
+12	1632100	100		Top 10": Greyish brown, medium SAND, trace coarse Sand grading to greyish brown, fine Sand, wet, loose	16.0
‡	1632111	100		Top 12": Greyish brown, fine SAND, wet, loose; Bottom 12": Grey, varved CLAY, wet, loose	0.2
+16				Bottom of Boring 16'	
20					
 			!		
24					
Comments	s: Boring	backfille	d with bent	l tonite chips	1
	5011119				

Project: VPSA Storage Area Add. Inv. LEA Comm No: 68V7056 **Start Date** Boring ID 04/16/97 Client: Pratt & Whitney **End Date** SK-SB-177 Location: East Hartford, CT 04/16/97 Logged By: J. Trzaski
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation: **Drilling Contractor:** LEA Drilling Method: Geopre Sampling Method: Maci Groundwater Observations: Geoprobe D. Brisson Macro Core

Sample No. 1632112 1632113 1632114 1632115	Recovery (x) 100 100 79	Blows /6"	Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness Top 2": Organic matter; Bottom 22": Dark yellowish brown, SILT and fine SAND, dry, loose, trace organic matter Top 4": As Above last 22"; Bottom 20": Strong brown, fine SAND and SILT grading to fine SAND, moist, loose Top 6": Greyish brown, fine SAND grading to very fine SAND, wet, loose; Middle 6": Grey, SILT, some fine Sand,	0 0
No. 1632112 1632113 1632114	100	Blows /6"	Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness Top 2": Organic matter; Bottom 22": Dark yellowish brown, SILT and fine SAND, dry, loose, trace organic matter Top 4": As Above last 22"; Bottom 20": Strong brown, fine SAND and SILT grading to fine SAND, moist, loose Top 6": Greyish brown, fine SAND grading to very fine SAND, wet, loose; Middle 6": Grey, SILT, some fine Sand,	0
1632114 1632114	79		SILT and fine SAND, dry, loose, trace organic matter Top 4": As Above last 22"; Bottom 20": Strong brown, fine SAND and SILT grading to fine SAND, moist, loose Top 6": Greyish brown, fine SAND grading to very fine SAND, wet, loose; Middle 6": Grey, SILT, some fine Sand,	0
1632114 1632115	79		Top 6": Greyish brown, fine SAND grading to very fine SAND, wet, loose; Middle 6": Grey, SILT, some fine Sand,	
1632115			SAND, wet, loose; Middle 6": Grey, SILT, some fine Sand,	1.2
	79		wet, loose; Bottom 7": Greyish brown, fine to very fine	
1632116	1 1		SAND, wet, loose Greyish brown, fine SAND (11") grading to fine to medium SAND, wet, loose (8")	0.8
	75		Greyish brown, fine to medium SAND, wet, loose	1.0
1632117	75		Top 6": As Above; Bottom 12": Greyish brown, medium SAND, trace coarse Sand, wet, loose	1.0
1632118	83		Top 15": Light olive grey, fine SAND, some very fine Sand, wet, loose; Bottom 5": Yellowish brown, medium SAND, trace coarse Sand, wet, loose	60.
1632119	83		Top 8": Yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose; Bottom 12": Grey, varved CLAY, wet, loose	1.0
			Bottom of Boring at 16'	
	1632118	1632118 83 1632119 83	1632118 83	SAND, trace coarse Sand, wet, loose Top 15": Light olive grey, fine SAND, some very fine Sand, wet, loose; Bottom 5": Yellowish brown, medium SAND, trace coarse Sand, wet, loose Top 8": Yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose; Bottom 12": Grey, varved CLAY, wet, loose

Project: VPSA Storage Area Add. Inv. LEA Comm No: 68V7056

Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor:
Drilling Method:
Sampling Method: LEA Geoprobe Macro Core

Groundwater Observations:

Depth: Hours At: Depth: At: Hours

Start Date 04/16/97 End Date 04/16/97

Boring ID

SK-SB-178

J. Trzaski Logged By:

Drilling Foreman: D. Bris Drill Rig: Geoprobe 5400 Surface Elevation: D. Brisson

Northing: Easting:

Elevation/ Depth	Sample No. 1632120	Recovery (X)	Blows /6"	Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity,	(ppm)
Depth			Blows /6"	Moisture, Sorting, Sphericity, Angularity,	(mag)
0	1632120	100		Sedimentary Structures, Density, Cohesiveness	
‡				Top 3": Organic debris; Bottom 21": Brown, SILT, some fine Sand, dry, loose, black-stained last (with organic matter) 4", trace organic matter	0.6
+ 1	1632121	100		Light yellowish brown, SILT and fine SAND, shading to very fine to fine Sand (15"), moist, loose	0.4
+4	1632122	75		Top 6": Light olive brown, very fine to fine SAND, wet, loose; Next 3": Grey, SILT, some fine Sand, wet, loose; Bottom 9": Greyish brown, very fine to fine SAND, Gravel,	1.7
]	1632123	75		Greyish brown, fine to medium SAND, wet, loose	0.4
+8	1632124	58		As Above	2.7
‡ †	1632125	58		As Above	46.0
12	1632126	83		Yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose	8.2
<u> </u>	1632127	83		Top 8": Greyish brown, fine SAND, trace(-) medium Sand, wet, loose; Bottom 12": Grey, varved CLAY, wet, loose	0.2
+ 16				Bottom of Boring at 16'	
+ + + 24			:		
Comments			A tol 1	tonite chips	

Project: VPSA Storage Area Add. Inv. LEA Comm No: 68V7056 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA Drilling Method: Sampling Method: Geoprobe Macro Core Groundwater Observations: Depth: Hours

Start Date 04/16/97 **End Date** 04/16/97

Boring ID SK-SB-179

Logged By: J. Trzaski

Drilling Foreman: D. Bris Drill Rig: Geoprobe 5400 Surface Elevation: D. Brisson

Depth:	1	At:	Hours	Easting:	- 1
	San	pie Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
°	1632128	100		Top 3": Organic matter; Bottom 21": Brown, fine SAND, some Silt, trace organic matter, dry, moderately dense	0
† † †	1632129	100		Top 5": Dark brown, SILT and sapric organic matter, moist, loose; Bottom 19": Yellowish brown, fine SAND, moist, loose	4.4
† 4 †	1632130	88		Top 4": Yellowish brown, very fine to fine SAND, wet, loose; Next 6": Grey, SILT, some fine Sand, wet, loose; Next 2": Same above top 4"; Bottom 9": Yellowish	1.2
Ī	1632131	88		Greyish brown, fine to medium SAND, wet, loose	0
+8	1632132	67		As Above	4.0
<u> </u>	1632133	67		Brownish grey, medium to fine SAND, trace coarse Sand, wet, loose	160
12	1632134	96		Top 8": As Above; Next 2": Yellowish brown, medium to coarse SAND; Next 6": Yellowish brown, fine to medium SAND; Bottom 7": Grey, varved CLAY, wet, loose	1.0
‡	1632135	96		Same as above last 7"	0
16				Bottom of Boring at 16'	
20				·	
24					
1		h = 1.6"	4		<u> </u>
Comments	s boring	DACKIIIIE	MINI DEN	tonite chips	

Project: VPSA Storage Area Add. Inv. **Start Date Boring ID** LEA Comm No: 68V7056 04/16/97 Client: Pratt & Whitney **End Date** SK-SB-180 East Hartford, CT Location: 04/16/97 **Drilling Contractor:** Logged By: J. Trzaski **LEA** Drilling Foreman: D. Brisson Drilling Method: Geoprobe Sampling Method: Macro Core Drill Rig: Geoprobe 5400 Surface Elevation: **Groundwater Observations:** Hour Northing: Depth: Hours Easting: Depth: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Sample No. Blows ecove) (۲) Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1632136 100 Top 2": Organic debris; Bottom 22": Dark yellowish brown, 500 SILT, some fine Sand, little organic matter, dry, loose 1632137 100 500 Top 6": Same as above last 22"; Middle 6": Black, sapric organic matter with dark brown, SILT; Bottom 12": Light yellowish brown, fine SAND, moist, loose 1632138 200 Top 6": Grevish brown, fine to very fine SAND, wet, loose: Next 7": Grey, SILT, trace fine Sand, wet, moderately dense; Bottom 7": Greyish brown, fine to very fine SAND, wet, loose 1632139 83 2.0 Grevish brown, fine SAND, grading to (12") fine to medium SAND, wet, loose 110 1632140 58 Greyish brown, fine to medium SAND, trace coarse Sand, wet, loose, 1" amber colored lense at 2" 1632141 58 280 As Above 12 20.0 1632142 100 Yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose 1632143 100 1.6 Top 12": As Above; Bottom 12": Grey, varved CLAY, wet, 16 Bottom of boring at 16' 20

Comments: Boring backfilled with bentonite chips

24

Project: VPSA Storage Area Add. Inv. LEA Comm No: 68V7056

Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA Drilling Method: Geoprobe Sampling Method: Macr Groundwater Observations: Depth: NM At: Macro Core

Hours

Start Date 04/17/97 **End Date** 04/17/97

Boring ID

SK-SB-181

Logged By: B. T. Drilling Foreman: B. Tomicic

D. Brisson Drill Rig: Geoprobe 5400 Surface Elevation:

Depth:		At:	Hours	Easting:	
	Sau	mple Informat	Information Sample Description	·····	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
T °	1632147	100		Top 4": Concrete; Dark brown, fine SAND, some(-) Silt, moderately dense, slightly moist, poorly sorted, assorted Cobbles	4.6
‡	1632148	100		Top 3": As Above; Bottom 21": Brown, fine SAND, some(+) coarse Sand, moist, loose, poorly sorted	4.5
+4	1632149	75		Top 4": As Above; 2": Grey, fine SAND, trace(+) Silt, dense; Bottom 12": Brown, coarse SAND, trace(-) fine Sand, moist, poorly sorted	4.4
†	1632150	75		As Above, mottled, wet	5.7
	1632151	62		Greyish brown, coarse SAND, trace(+) fine Sand, wet, loose, poorly sorted	4.4
‡	1632152 1632153	62		As Above	4.6 4.4
12	1632154	100		As Above	3.2
‡	1632155	100		Top 10": As Above, mottled; Bottom 18": Olive grey, varved CLAY, dense	2.3
+16	,			Bottom of Boring at 16'	
20					
24					
<u> </u>					
Commer	its: Boring	backfille	d with bent	tonite chips upon completion	

VPSA Storage Area Add. Inv. Project: **Start Date Boring ID** LEA Comm No: 68V7056 04/17/97 Client: Pratt & Whitney **End Date** SK-SB-182 Location: East Hartford, CT 04/17/97 Logged By: LEA **Drilling Contractor: B.** Tomicic Drilling Foreman: Drill Rig: Geopre Surface Elevation: **Drilling Method:** Geoprobe D. Brisson Sampling Method: Macro Core Geoprobe 5400 Groundwater Observations: Depth: NM At: Hours Northing: Easting: Depth: At: Hours

	San	nple Inform	ation	Sample Description	
Elevation/ Depth	Sample No.	Recovery (光)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632156	79		Top 29": Bituminous concrete; Bottom 1': Brown, fine SAND and(-) coarse Sand, moderately dense, poorly sorted, Cobbles (rip rap)	2.2
‡	1632157	79		Brown, fine SAND, some(+) coarse Sand, slightly moist, moderately dense, poorly sorted	2.8
4	1632158	88		Top 1': As Above; 6": Grey, fine SAND, some(-) Silt, moderately dense; Bottom 6": Brown, fine SAND, some(+) coarse Sand, moist	5.1
†	1632159	88		As Above; 1": Mottled layer at 7', wet	4.6
-8	1632160	75		As Above	4.4
	1632161	75		As Above, mottled	13.2
+12	1632162	100		Brown, fine SAND and coarse SAND, wet, loose	2.5
†	1632163	100		Top 6": Brown, coarse SAND, some(-) fine Sand, wet, loose; Bottom 1.5': Olive grey, varved CLAY, dense	3.3
				Bottom of Boring at 16'	
+ + 20					
+24					
Comment	s: Boring	backfill	ed with ber	ntonite chips upon completion	

Printed On: 2/9/1998

Project: VPSA Storage Area Add. Inv. Start Date **Boring ID** LEA Comm No: 68V7056 04/17/97 Client: Pratt & Whitney **End Date** SK-SB-183 Location: East Hartford, CT 04/17/97 **Drilling Contractor:** Logged By: B. Tomicic LEA Drilling Method: Drilling Foreman: D. Brisson Geoprobe Macro Core Geoprobe 5400 Sampling Method: Drill Rig: Surface Elevation: Groundwater Observations: Depth: NM Hours Northing: At: Hours Depth: At: Easting: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Sample No. Blows cover (な) Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness ō 1632164 83 3.4 Top 4": Concrete; Dark brown, fine SAND, trace(-) Silt, slightly moist, moderately dense 4.5 1632165 83 Brown, fine SAND, trace(+) coarse Sand, slightly moist, moderately dense, poorly sorted, slightly rank odor 1632166 2.3 Top 12": Grey brown, fine SAND, some(+) coarse Sand, wet, loose, rank odor, Cobbles & Pebbles; Bottom 6": Brown, fine SAND, some(+) coarse Sand, wet, moderately dense, poorly sorted, 2" CLAY lense at 5' 1632167 83 4.5 As Above, 2" mottled layer at 7' 8 1632168 88 9.1 As Above; loose 1632169 ЯR 8.5 As Above 12 1832170 3.1 As Above Printed On: 2/9/1998 5.9 1632171 75 Olive grey, varved CLAY, dense 16 Bottom of Boring at 16' 20 24 Boring Comments: Boring backfilled with bentonite chips upon completion z



Project: VPSA Storage Area Add. Inv. LEA Comm No: 68V7056 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA **Drilling Method:** Geoprobe Sampling Method: Macr Groundwater Observations: Macro Core Hours 🚆 Depth: NM At:

Start Date 04/17/97 End Date 04/17/97

Boring ID

SK-SB-184

Logged By: B. To Drilling Foreman: B. Tomicic D. Brisson Drill Rig: Geoprobe 5400 Surface Elevation:

Northing:

Depth:	· ·	\t:	Hours	Easting:	
	San	ple Informat	ion	Sample Description	
Elevation/ Depth	Sample No.	Recovery .	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
,	1632172	83		Top 3": Bituminous concrete; 6": Red, coarse SAND, some(-) fine Sand, dry, loose, Cobbles; Bottom 7": Blackish brown, coarse SAND, trace(+) fine Sand, slightly moist, moderately dense, Cobbles, fibric organic matter	2.4
‡	1632173	83		Top 6": As Above; Bottom 18": Brown, fine SAND, trace(-) coarse Sand, slightly moist, moderately dense	4.2
+4	1632174	100		Top 1': As Above; 4": Olive grey, SILTY CLAY, dense; 8": Brown, medium SAND, trace(-) coarse Sand, slightly moist, loose	2.8
‡	1632175	100		As Above, moist	4.2
- 8	1632176	62		As Above, wet	5.3
†	1632177	62		As Above	39.2
12	1632178	100		Top 1': Grey, coarse SAND, some(+) medium Sand, wet, loose; Bottom 1': Reddish brown, medium SAND, some(-) coarse Sand, wet, loose	4.3
‡	1632179	100		Top 1': As Above; Bottom 1': Olive grey, varved CLAY, dense	3.9
+ 16 + + + + +				Bottom of Boring at 16'	
† 					
† Comments	: Boring	backfilled	d with bent	tonite chips upon completion	



Printed On: 2/9/1998

Project: VPSA Storage Area Add. Inv. LEA Comm No: 68V7056 LEĂ Comm No: Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA Drilling Method: Sampling Method: Geoprobe

Macro Core **Groundwater Observations:**

Hours

Depth: NR

Start Date 04/18/97 **End Date** 04/18/97

Boring ID SK-SB-185

Logged By: J. Sweeton Drilling Foreman: D. Bris Drill Rig: Geoprobe 5400 Surface Elevation: D. Brisson

Depth:	Ā	At:	Hours	Easting:	
	San	nple Informs	ation	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1632181	95	•	0-2": Bituminous Pavement; 2-4": Process stone; 4-21": Dark brown, fine SAND, some Silt, little medium Sand, moist, loose	1.6
Ŧ +	1632182	95		0-4": As Above; 4-8": Dark grey, SILT, some fine Sand, organic matter, moist, dense; 8-22": Brown, fine SAND and medium SAND, moist, loose	60
+4	1632185	91		0-2": Grey brown, fine SAND, trace Silt, moist, loose; 2-20": Brown, fine SAND, trace medium Sand, moist, loose; 20-22: Brown, medium SAND, trace Silt, trace coarse Sand,	150
†	1632184	91		\moist, loose 0-20": As Above	100
+8	1632185	82		0-18*: Brown, medium SAND, trace Silt, trace fine Sand, wet, loose	20
†	1632186	82		0-18": Brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose	10
+12	1632187	100		0-22": Brown, medium SAND, trace fine Sand, wet, loose	4
† † †	1632188	100		0-8": Red brown, coarse SAND, some medium Sand, wet, loose; 8-22": Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense	2
+ 16 + + + + + + + + + + + + + + + + + + +				Bottom of Boring at 16'	
+20 +					
24					
Comments	:	1		<u> </u>	1

Project: VPSA Storage Area Add. Inv. LEA Comm No: 68V7056 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor: LEA** Drilling Method: Sampling Method: Geoprobe Macro Core **Groundwater Observations:** Depth: NR Hours At: Depth: At: Hours

Start Date 04/18/97 **End Date** 04/18/97

Boring ID

SK-SB-186

Logged By: J. Sweeton Drilling Foreman: D. Bris Drill Rig: Geoprobe 5400 Surface Elevation: D. Brisson

Northing: Easting:

Sample Information Sample Description Special Sample Description Sample Description Special Special Sample Description Special S	Depth Sample Recovery Stage 1 Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness Co-2*: Bit pave; 2-4*: Process stone; 4-19*: Dark brown, medium SAND, some fine Sand, trace organics, moist, donse; 11-19*: Grey prown, fine SAND, some Silt, some organics, moist, dense; 11-19*: Grey, medium SAND, trace fine Sand, moist, donse; 11-19*: Grey, medium SAND, trace fine Sand, moist, donse; 1-19*: Grey, medium SAND, trace fine Sand, moist, donse; 1-19*: Grey, medium SAND, trace fine Sand, moist, donse; 1-19*: Grey, medium SAND, trace fine Sand, wet, loose 1632192 91 0-6*: As Above; 16-20*: Red brown, medium SAND, trace fine Sand, trace coarse Sand, wet, loose 1632193 91 0-20*: Brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose 1632194 91 0-20*: As Above 1632196 95 0-21*: Red brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose 1632196 95 0-11*: As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense Bottom of boring at 16*	ъерш.		11:	110013	± . Espring.	
1632191 91 0-6": Grey, fine SAND, some medium SAND, trace fine Sand, trace coarse Sand, trace fine Sand, wet, loose 1632194 91 0-20": Brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose 1632194 95 0-21": Red brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose 1632196 95 0-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense 2	1632193 91 1632194 91 0-20": Brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose 1632194 91 0-20": Brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose 1632196 95 0-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, wat, loose 1632196 95 0-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, wat, loose 1632196 95 0-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, wat, loose 1632196 95 0-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, wat, loose 1632196 95 0-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, wat, loose 1632196 95 0-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, wat, loose 1632196 95 0-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, wat, loose 1632196 95 0-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense 1632196 95 0-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense 1632196 95 0-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense 1632196 95 0-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense 1632196 0-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense 1632196 0-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense 0-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense 0-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense 0-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense 0-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense 0-11": As Above; 11-21: Grey, CLAY, trace fine Sand, trace Silt, varve, moist, dense 0-11": As Above; 11-21":		San	aple Informa	tion		
medium SAND, some fine Sand, trace organics, moist, loose 1632190 86 0-8": As Above; 8-11": Grey brown, fine SAND, some Silt, some organics, moist, dense; 11-19": Grey, medium SAND, trace fine Sand, moist, loose 1632191 91 0-6": Grey, fine SAND, some medium Sand, moist, dense; 6-22": Brown, medium SAND, trace fine Sand, wet, loose 1632192 91 0-16": As Above; 16-20": Red brown, medium SAND, trace fine Sand, trace coarse Sand, wet, loose 1632193 91 0-20": Brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose 1632194 91 0-20": As Above 10 1632196 95 0-21": Red brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose 1632196 95 0-21": Red brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose 1632196 95 0-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense 16 Bottom of boring at 16"	1632190 86 O-8": As Above; 8-11": Grey brown, fine SAND, some Silt, some organics, moist, dense; 11-19": Grey, medium SAND, trace fine Sand, moist, dense; 11-19": Grey, medium SAND, trace fine Sand, moist, dense; 1632191 91 O-6": Grey, fine SAND, some medium Sand, moist, dense; 6-22": Brown, medium SAND, trace fine Sand, wet, loose 1632192 91 O-16": As Above; 16-20": Red brown, medium SAND, trace fine Sand, trace coarse Sand, wet, loose 1632193 91 O-20": Brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose 1632194 91 O-20": As Above 10 10 12 1632195 95 O-21": Red brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose 1632196 95 O-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense Bottom of boring at 16'	Elevation/ Depth	Sample No.	Recovery (火)	Blows /6*	Moisture, Sorting, Sphericity, Angularity,	(ppm)
1632191 91 0-6": Grey, fine SAND, some medium SAND, trace fine Sand, moist, loose 100	some organics, moist, dense; 11-19": Grey, medium SAND, trace fine Sand, moist, loose 1632191 91 0-6": Grey, fine SAND, some medium Sand, moist, dense; 6-22": Brown, medium SAND, trace fine Sand, wet, loose 1632192 91 0-16": As Above; 16-20": Red brown, medium SAND, trace fine Sand, trace coarse Sand, wet, loose 1632193 91 0-20": Brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose 1632194 91 0-20": As Above 10 10 12 1632195 95 0-21": Red brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose 1632196 95 0-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense 2 16 16 16 16 16 16 16	P	1632189	86			71000
6-22": Brown, medium SAND, trace fine Sand, wet, loose 1632192 91 O-16": As Above; 16-20": Red brown, medium SAND, trace fine Sand, trace coarse Sand, wet, loose 1632193 91 O-20": Brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose 1632194 91 O-20": As Above 10 O-20": As Above 10 O-21": Red brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose 1632196 96 O-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense Bottom of boring at 16'	6-22": Brown, medium SAND, trace fine Sand, wet, loose 1632192 91	‡	1632190	86		some organics, moist, dense; 11-19": Grey, medium SAND,	71000
fine Sand, trace coarse Sand, wet, loose 1632193 91 0-20": Brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose 1632194 91 0-20": As Above 10 1632195 95 0-21": Red brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose 1632196 95 0-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense Bottom of boring at 16'	fine Sand, trace coarse Sand, wet, loose 1632193 91 O-20": Brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose 1632194 91 O-20": As Above 10 12 1632195 95 O-21": Red brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose 1632196 95 O-11": As Above: 11-21: Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense Bottom of boring at 16'	† *	1632191	91		0-6": Grey, fine SAND, some medium Sand, moist, dense; 6-22": Brown, medium SAND, trace fine Sand, wet, loose	100
Sand, wet, loose 1632194 91 0-20*: As Above 10 12 1632195 96 0-21*: Red brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose 1632196 95 0-11*: As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense 16 Bottom of boring at 16*	Sand, wet, loose 1632194 91 0-20": As Above 10 1632195 95 0-21": Red brown, medium SAND, some coarse Sand, trace 2 1632196 95 0-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense 16 Bottom of boring at 16'	†	1632192	91			70
1632195 95 O-21": Red brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose 1632196 95 O-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense Bottom of boring at 16'	1632196 95 O-21*: Red brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose 1632196 95 O-11*: As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense Bottom of boring at 16*	+8	1632193	91			80
1632196 95 O-21": Red brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose 1632196 95 O-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense Bottom of boring at 16'	1632196 95 O-21": Red brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose 1632196 95 O-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense Bottom of boring at 16'	†	1632194	91		0-20": As Above	10
Sand, trace Silt, varve, moist, dense Bottom of boring at 16'	Sand, trace Silt, varve, moist, dense Bottom of boring at 16'	- 12	1632195	96			2
Bottom of boring at 16'	Bottom of boring at 16'	‡	1632196	95	<u>.</u> :		2
	-24	+16 + + + +				Bottom of boring at 16'	
24							
+ 24		† † +					
†	Comments:	24					
	Comments:						<u> </u>

Project: VPSA Storage Area Add. Inv. LEA Comm No: 68V7056

Hours

Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: Drilling Method: Geoprobe Sampling Method: Macro Core

Groundwater Observations:

Depth: NR

Start Date 04/18/97 **End Date** 04/18/97

Boring ID

SK-SB-187

Logged By: J. Sweeton
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation: D. Brisson

Northing:

Depth:		At:	Hours	Easting:	
	San	nple Inform	ation	Sample Description	
Elevation/ Depth	Sample No.	Recovery (な)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
+	1632197	82		0-2": Bit pav: 2-6": Process stone; 6-22": Dark brown, fine SAND, some medium Sand, trace coarse Sand, trace organic, trace Silt, moist, loose	0
† †	1632198	82		0-8": As Above; 8-12": Black brown, fine SAND, some organic, trace Silt, moist, loose; 12-18": Brown, medium SAND, some fine Sand, trace Silt, moist, loose	0
+4	1632199	95		0-3": As Above; 3-6": Grey, SILT, some fine Sand, moist, dense; 6-9": Brown, SILT, some fine Sand, moist, dense; 9-21": Brown, fine SAND, some medium Sand, trace Silt,	600
† †	1632200	95		O-21": Brown, medium SAND, trace fine Sand, trace coarse Sand, wet, loose	> 1000
+8	1632201	82		0-18": Brown, medium SAND, some coarse Sand, trace Silt, wet, loose	60
‡	1632202	82		0-10": As Above; 10-18": Red brown, medium SAND, some coarse Sand, wet, loose	80
+12 +	1632203	100		0-14": Red brown, medium SAND, trace fine Sand, wet, loose; 14-22": Red brown, medium SAND, some coarse Sand, trace fine Sand, trace Gravel, wet, loose	2
‡	1632204	100		0-5": As Above; 5-22": Grey, CLAY, trace fine SAND, trace Silt, moist, dense	2
-16				Bottom of Boring at 16'	
-24					

3K-SB**-187**

Project: VPSA Storage Area Add. Inv.

LEA Comm No: 68V7056

Client: Pratt & Whitney

Location: East Hartford, CT

Drilling Contractor: LEA

Drilling Method: Geoprobe

Sampling Method: Macro Core

Groundwater Observations:

Depth: At: Hours

Start Date 04/21/97 End Date 04/21/97

Boring ID

SK-SB-188

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:

Northing: Easting:

Depth:	. A	At:	Hours	Easting:		
	San	nple Informs	rtion	Sample Description		
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
0	1632212	88		Top 2": Organic debris; Middle 12": Dark yellowish brown, SILT with fine Sand, dry, loose, little organic matter; Bottom 7": Reddish brown, fine SAND, moist, loose, trace	3.5	
‡ ‡	1632213	88		Top 5": Same as above last 7", wet, loose, wet at top; Middle 8": Grey, SILT, moist, moderately dense, some organic matter; Bottom 8": Olive grey, fine to very fine	450	
+4	1632214	75		SAND, moist, loose Greyish brown, very fine to fine SAND (8") grading to fine SAND (10"), wet, loose, wet at top	3.0	
‡	1632215	75		Greyish brown to yellowish brown, fine to medium SAND, wet, loose	7.4	
+8	1632216	58		As Above	15.0	
† †	1632217 1632218	58		Top 7": Greyish brown, fine to very fine SANd, wet, loose; Bottom 7": Greyish brown, fine to medium SAND, wet, loose	18.0	
12	1632219	100		Yellowish brown, fine to medium SAND, trace coarse Sand, wet, loose	75.0	
† + +	1632220	100		Top 6": Yellowish brown, medium SAND, wet, loose; Bottom 18": Grey, varved CLAY, wet, loose	3.0	
+16				Bottom of boring at 16'		
20						
+24						
Comments						

Printed On: 2/9/1998

Project: VPSA Storage Area Add. Inv. LEA Comm No: 68V7056 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA Drilling Method: Geoprobe Sampling Method: Macro Core **Groundwater Observations:** Hours

Start Date Boring ID 04/21/97 **End Date** SK-SB-189 04/21/97

Logged By: J. Trzaski Drilling Foreman: D. Brisson Drill Rig: Geopre Surface Elevation: Geoprobe 5400 Northing: Easting:

		At:	Hours	Easting:	
	San	ple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (१)	Blows /6°	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1632221	71		Dark yellowish brown to yellowish brown, fine SAND, little Silt, moist, loose, little organic matter, concrete pieces at 7" and 10-13"	3.2
‡	1632222	71		Top 5": Yellowish brown, fine SAND, wet, loose (wet at top); Bottom 11": Grey, SILT, moist, dense, black-staining top 4", Cobble at top	60.0
† 4	1632223	· 75		Top 8": Grey, SILT, some fine Sand, moist, moderately dense; Bottom 8": Grey, very fine to fine SAND, wet, loose	4.0
† † ‡	1632224	75		Top 4": As Above last 8"; Bottom 14": Greyish brown, fine SAND, wet, loose	6.0
+8 +	1632225	50		Top 10": Yellowish brown, fine SAND, little medium Sand, wet, loose; Bottom 2": Greyish brown, medium fine to very fine SAND	7.4
† † †	1632226	50		Top 6": As Above last 2"; Bottom 6": Greyish brown, medium to fine SAND, wet, loose	11.0
+12	1632227	100		Yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose	3.2
†	1632228	100		Top 4": As Above; Bottom 20": Grey, varved CLAY, wet, loose	4.4
+16 - - -				Bottom of Boring at 16'	
+ 20 +				·	
24					

VPSA Storage Area Add. Inv. Project: LEA Comm No: 68V7056 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA Drilling Method: Geopro Sampling Method: Macr Groundwater Observations: Geoprobe Macro Core Depth: Hours

Start Date 04/21/97 End Date 04/21/97

Boring ID

SK-SB-190

Logged By: J. To Drilling Foreman: Drill Rig: Geopt Surface Elevation: J. Trzaski D. Brisson Geoprobe 5400

Depth:	Ā	At:	Hours	Easting:	
	San	nple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (४)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1632229	92		Dark yellowish brown, SILT with fine SAND, little organic matter, dry, loose	20.0
+	1632230	92		Dark brown, SILT with fine SAND, some organic matter, moist, loose, wet at bottom	>1000
+4	1632231	92		Top 4": As Above, wet, loose; Middle 10": Grey, SILT, some fine Sand, wet, moderately dense; Bottom 8": Greyish brown, fine to very fine SAND	300
1	1632232	92		Greyish brown, fine SAND, wet, loose	6.0
8	1632233	71		Top 4": Yellowish brown, fine to medium SAND, wet, loose; Bottom 13": Greyish brown, fine SAND, wet, loose	45.0
†	1632234	71	<u></u>	Top 6": Greyish brown, fine to medium SAND; Bottom 11": Yellowish brown, medium to fine SAND, wet, loose	4.6
†12 †	1632235	100	_	Greyish to yellowish brown, fine SAND, wet, loose	0
† †	1632236	100		Top 6": Greyish brown, fine to medium SAND, wet, loose; Bottom 18": Grey, varved CLAY, wet, loose	1.6
+16 + + + + + + +				Bottom of Boring at 16'	
+ 20 +					
-24					
Comments	:				

Project: VPSA Storage Area Add. Inv. LEA Comm No: 68V7056

Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: Drilling Method: Sampling Method: LEA Geoprobe Macro Core **Groundwater Observations:**

Depth: Depth:

At: At:

Hours

Start Date 04/21/97 End Date 04/21/97

Boring ID

SK-SB-191

Logged By: J. Trzaski
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation: D. Brisson

Northing: Easting:

Depth: Depth:		kt: kt:	Hours Hours	Rortning:	
	Sam	ple Informat	on	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm
10	1632237	71		Top 2": Bituminous asphalt; Next 3": Red, medium to fine SAND, trace(-) fine and coarse Gravel, dry, loose; Next 7": Yellowish brown, fine SAND, dry, loose; Bottom 5": dark brown, SILT, little fine Sand, little organic matter	180 >100
‡	1632238			Top 11": Same as above last 5", moist, loose, wet at 11"; Bottom 6": Grey, SILT, moist, moderately dense	/100
+4	1632239	92		Top 8": Same as above last 6"; Bottom 14": Greyish brown, very fine to fine SAND, wet, loose	>100
‡	1632240	92		Greyish brown, fine SAND (12") grading to (10") fine to medium SAND, wet, loose	100
+8	1632241	75		Greyish to yellowish brown, fine SAND, wet, loose	23.0
Ī	1632242	76		Greyish brown, fine to medium SAND, wet, loose	35.0
+ 12	1632243	83		Yellowish brown, medium to fine SAND, wet, loose	1.6
†	1632244	83		Top 15": Yellowish brown, fine to medium SAND, wet, loose; Bottom 5": Grey, varved CLAY, wet, loose	1.6
16				Bottom of Boring at 16'	
† †	_				
20			!		
<u> </u>			i		
24					

Printed On: 2/12/1998

VPSA Storage Area Add. Inv. Start Date Project: **Boring ID LEA Comm No:** 68V7056 04/22/97 Client: Pratt & Whitney **End Date** SK-SB-192 Location: East Hartford, CT 04/22/97 Logged By: J. T. Drilling Foreman: **Drilling Contractor:** LEA J. Trzaski Drilling Method: Geoprobe D. Brisson Drill Rig: Geoprobe 5400 Surface Elevation: Sampling Method: Macro Core **Groundwater Observations:** Depth: Northing: Hours At: Easting: Depth: At: Hours

рерш:	P.	rr:	Hours	± rasting:	
	Sam	ple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm
0	1632256	67		Top 5": Dark brown, SILT, little fine Sand, little organic matter, moist, loose; Bottom 11": Yellowish brown, fine SAND, moist, loose	4.5
‡	1632257			Top 6": Same as above last 11", moist, loose; Middle 2": Black, sapric organic matter with dark brown SILT, moist, loose; Bottom 8": Grey, SILT, trace fine Sand, moist, moderately dense	62
‡	1632258	75		Top 5": Same as above last 8", wet at top; Bottom 13": Greyish brown, fine SAND, wet, loose	9.5
<u> </u>	1632259			Same as above last 13"	9.3
8	1632260	71		Yellowish brown, fine to medium SAND, wet, loose	8.0
‡ ‡	1632261 1632262			As Above, trace coarse SAND	5.8
12	1632263	100		Yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose	4.2
Ī	1632264			Top 5": As Above; Bottom 19": Grey, varved CLAY, wet, loose	2.2
16		+		Bottom of Boring at 16'	<u>. </u>
+ + + +	_				
20					
† † †					
24					
+	I	1 1	- 1		1

Project: VPSA Storage Area Add. Inv. LEA Comm No: 68V7056

Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: Drilling Method: Geoprobe Sampling Method: Macro Core

Groundwater Observations: Depth: NR At:

Hours

Start Date 04/22/97 **End Date** 04/22/97

Boring ID

SK-SB-193

Logged By: D. Brisson

Drilling Foreman: J. Trza Drill Rig: Geoprobe 5400 J. Trzaski

Surface Elevation:

Depth:	At:		Hours	Hours ₹ Easting:		
Elevation/ Depth	San	nple Informs	tion	Sample Description		
	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
10	1632265	83		Top 4": Topsoil; Bottom 16": Brown, fine to very fine SAND and SILT, trace organic matter, wet, moderately dense	0	
+4	1632266			Top 8": As Above with trace Gravel; Middle 8": Dark brown to black, very fine SAND and SILT, trace fine Sand, organic matter, moist, dense; Bottom 4": Light brown, fine SAND,	50	
+4	1632267	83		wet, loose Top 10": Grey, very fine SAND and SILT, trace fine Sand, moist, dense; Bottom 10": Dark grey, medium fine SANd, wet, loose	18	
Ī	1632268			Top 20": As Above; Bottom 10"	5	
-8	1632269	75		Top 5": As Above; Bottom 13": Grey, fine to very fine SAND, wet, loose	2	
†	1632270			18": Grey orange brown, medium to fine SANd, trace(-) coarse Sand, wet, loose	2	
12	1632271	75		Top 8": As Above; Middle 4": Grey, medium to fine SAND, little coarse Sand, wet, loose; Bottom 4": Orange brown, coarse to fine SAND, wet, loose, iron staining	1.5	
† †	1632272			18": Grey, CLAY, trace fine Sand, wet, dense, varved	0.5	
				Bottom of Boring at 16'		
Comments	:					

Project: VPSA Storage Area Add. Inv. Start Date **Boring ID** LEA Comm No: 68V7056 04/22/97 Client: Pratt & Whitney **End Date** SK-SB-194 Location: East Hartford, CT 04/22/97 **Drilling Contractor:** Logged By: J. Trzaski LEA D. Brisson Drilling Method: Geoprobe Drilling Foreman: Sampling Method: Macro Core Drill Rig: Geoprobe 5400 Surface Elevation: Groundwater Observations: Depth: At: Hours Northing: Hours Depth: At: Easting: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes. Elevation/ Depth Blows Sample No. Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1632273 83 >1000 Top 4": Black bituminous asphalt; Middle 3": Red, medium SANd, little fine and coarse Gravel, trace fine Sand, dry, loose, Fill; Bottom 13": Dark brown, SILT and fine SAND, some organic matter, moist, loose 1632274 > 1000 Top 11": Same as above last 13": Middle 3": Black, sapric organic matter; Bottom 6": Grey, SILT, some fine Sand, moist, moderately dense 1632275 54 900 Top 10": Same as above last 6", wet at top; Bottom 3": Greyish brown, fine to very fine SANd, wet, loose 1632276 400 Grevish brown, fine SAND, wet, loose 1632277 3.2 71 Orangish brown, fine to medium SAND, wet, loose 1632278 3.4 Greyish brown, fine SANd (6") grading light olive brown fine to medium SAND (11"), wet, loose 12 1632279 100 0.7 Top 8": Yellowish brown, medium SAND, tree coarse Sand, wet, loose; Bottom 16": Yellowish brown, medium to fine SANd, wet, loose Printed On: 2/9/1998 2.2 1632280 Top 8": Same as above last 16": Bottom 16": Grey, varved CLAY, wet, loose 16 Bottom of Boring at 16' 20 24 Boring

Comments:

VPSA Storage Area Add. Inv. m No: 68V7056 Project: LEA Comm No: Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA

Drilling Method: Geoprobe Macro Core Sampling Method: **Groundwater Observations:**

Depth:

At:

Start Date 04/23/97 End Date 04/23/97

Boring ID

SK-SB-195

X-SB-195

J. Trzaski Logged By:

D. Brisson Drilling Foreman: Drill Rig: Geoprobe 5400 Surface Elevation:

Northing: Fasting:

Sample No. 1632284 1632285 1632286 1632287 1632288	Ple Informa Recovery (X) 88	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness Top 3": Organic debris with Dark brown, very fine to fine SAND, Cobble at 4": Bottom 18": Dark yellowish brown, fine to very fine SAND, little organic matter, trace Silt, moist, loose Top 13": Pale brown, SILT, little organic matter, moist, loose; Bottom 8": Yellowish brown, fine SAND, wet, loose Top 8": Grey, SILT with fine Sand, wet, moderately dense, loose; Middle 8": Greyish brown, fine to very fine SAND, wet, loose; Bottom 4": Greyish brown, fine SAND, wet, loose; Bottom 4": Greyish brown, fine SAND, wet, loose	(ppm) 1.6 0.8
1632284 1632285 1632286 1632287	88	Blaws /6"	Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness Top 3": Organic debris with Dark brown, very fine to fine SAND, Cobble at 4": Bottom 18": Dark yellowish brown, fine to very fine SAND, little organic matter, trace Silt, moist, loose Top 13": Pale brown, SILT, little organic matter, moist, loose; Bottom 8": Yellowish brown, fine SANd, wet, loose Top 8": Grey, SILT with fine Sand, wet, moderately dense, loose; Middle 8": Greyish brown, fine to very fine SAND, wet, loose; Bottom 4": Greyish brown, fine SANd, wet,	0.8
1632285 1632286 1632287 1632288			SAND, Cobble at 4": Bottom 18": Dark yellowish brown, fine to very fine SAND, little organic matter, trace Silt, moist, loose Top 13": Pale brown, SILT, little organic matter, moist, loose; Bottom 8": Yellowish brown, fine SANd, wet, loose Top 8": Grey, SILT with fine Sand, wet, moderately dense, loose; Middle 8": Greyish brown, fine to very fine SAND, wet, loose; Bottom 4": Greyish brown, fine SANd, wet,	0.8
1632286 1632287 1632288	83		Top 13": Pale brown, SILT, little organic matter, moist, loose; Bottom 8": Yellowish brown, fine SANd, wet, loose Top 8": Grey, SILT with fine Sand, wet, moderately dense, loose; Middle 8": Greyish brown, fine to very fine SAND, wet, loose; Bottom 4": Greyish brown, fine SANd, wet,	
1632287 1632288	83		loose; Middle 8": Greyish brown, fine to very fine SAND, wet, loose; Bottom 4": Greyish brown, fine SANd, wet,	2.8
			rsloose c	
1632289	1 1		Same as above last 4"	2.3
	58		Yellowish brown, fine SAND, trace medium Sand, wet, loose	2.6
1632290			Yellowish brown, fine to medium SAND, wet, loose	4.8
1632291	96		Top 12": As Above; Bottom 13": Yellowish brown, fine SAND, little very fine Sand, wet, loose	3.5
1632292			Top 18": Yellowish brown, fine SAND, trace medium Sand, wet, loose; Bottom 5": Grey, varved CLAY, wet, loose	3.6
			Bottom of Boring 16'	
-14				
				<u></u>
1	632291	632291 96	632291 96	Top 12": As Above; Bottom 13": Yellowish brown, fine SAND, little very fine Sand, wet, loose Top 18": Yellowish brown, fine SAND, trace medium Sand, wet, loose; Bottom 5": Grey, varved CLAY, wet, loose

Project: VPSA Storage Area Add. Inv.

LEA Comm No: 68V7056
Client: Pratt & Whitney
Location: East Hartford, CT

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Start Date 04/23/97 End Date 04/23/97

Boring ID

SK-SB-196

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:

Depth:	A	At:	Hours	Easting:	
	San	nple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blaws /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632293	83		Top 12": Red, medium to fine SAND, little fine to coarse Gravel, trace coarse Sand, dry, loose, Fill; Middle 2": Black, sapric organic matter; Bottom 6": Brownish yellow, SILT, little organic matter, moist, loose	3.5
‡	1632294			Top 14": Same as above last 6", grading to; Bottom 6": Yellowish brown, fine SANd, wet, loose	4.0
+4	1632295	79		Top 12": Same as above last 6"; Bottom 7": Greyish brown, fine to very fine SAND, wet, loose	6.0
† †	1632296			Top 5": Grey, SILT, some fine Sand, wet, moderately dense; Bottom 14": Yellowish brown to greyish brown fine SAND, trace medium Sand, wet, loose	4.0
+8	1632297	71		Greyish brown, fine SAND, trace medium Sanbd, trace very fine Sand, wet, loose	0
‡	1632298			Top 6": As Above; Bottom 11": Orangish brown, fine to medium SANd, wet, loose	0
+12	1632299	75		Top 6": As Above; Bottom 12": Greyish brown, fine to very fine SAND, wet, loose	0
† †	1632300		:	Top 3": Same as last 12"; Middle 5": Yellowish brown, medium to fine SAND; Bottom 10": Grey, varved CLAY, wet, loose	0
16	-			Bottom of Boring at 16'	
20					
†				·	
24					
Comments	<u> </u>				<u> </u>

Start Date Project: VPSA Storage Area Add. Inv. **Boring ID** 68V7056 04/23/97 LEA Comm No: Client: Pratt & Whitney **End Date** SK-SB-197 Location: East Hartford, CT 04/23/97 Logged By: D. Brisson **Drilling Contractor: LEA Drilling Method:** Geoprobe Drilling Foreman: J. Trzaski Sampling Method: Macro Core Drill Rig: Geoprobe 5400 **Groundwater Observations:** Surface Elevation: Depth: Hou At: Northing: Depth: Hours Easting: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Blows /6" Sample No. Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 60 1632301 83 Top 4": Red brown, coarse to fine SAND and loose; Middle 3": Dark brown to black, trace fine SAND and SILT, trace organics, wet, dense; Bottom 13": Brown, fine to very fine SAND, trace(-) Silt, trace organics, wet, 1632302 15 dense 20": Light brown, fine SAND, trace(-) medium Sand, wet. trace organics, loose 1632303 50 15 12": Light brown, fine SAND, trace(-) medium Sand, wet, 1632304 5 12": As Above 1632305 4.2 15": Grey, fine to medium SAND, wet, loose 1632306 3.0 Top 8": Orange brown, fine to medium SAND, wet, loose; Middle 1": Black, fine to coarse SAND, wet, loose; Bottom 6": Grey, fine SAND, trace(+) medium Sand, wet, loose 12 1632307 83 3.5 Top 10": Orange brown, fine to medium SAND, trace(+) coarse Sand, wet, loose; Bottom 10": Olive grey, fine SANd, wet, loose Printed On: 2/9/1998 2.0 1632308 Top 6": Grey, orange brown, medium to fine SAND, trace(+) coarse Sand, wet, loose; Bottom 14": Grey, CLAY, trace fine to very fine Sand, varved, wet, dense 16 Bottom of Boring at 16' 20 24 Boring **Comments:** Z Project: VPSA Storage Area Add. Inv.
LEA Comm No: 68V7056
Client: Pratt & Whitney
Location: East Hartford, CT
Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Start Date \\
04/23/97
End Date \\
04/23/97

Boring ID

SK-SB-198

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:

Northing: Easting:

Depth:	Ā	\t:	Hours	Easting:	
	San	ple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (な)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	16324309	100		Top 4": Organic debris; Bottom 20": Dark yellowish brown, SILT and fine to very fine SAND, moist, loose, trace organic matter	9.0
‡ ‡	1632310			Top 14": Brownish yellow, SILT and fine to very fine SANd, wet, loose; Bottom 10": Dark brown, SILT and fine to very fine SAND, wet, loose	40
+4	1632311	79		Top 4": Dark brown, SILT and very fine SAND, wet, loose; Middle 8": Grey, SILT, some fine to very fine Sand, wet, moderately dense; Bottom 7": Greyish brown, fine to very	50
Ī	1632312			Greyish brown, fine SANd, wet, loose	10
-8	1632313	62		Top 6": Greyish brown, fine to coarse SAND, wet, loose; Bottom 9": Orangish brown, fine to medium SAND, wet, loose	3.8
†	1632314			Top 4": Same as above last 9"; Middle 6": Greyish brown, fine SAND, wet, loose; Bottom 5": Yellowish brown, fine to medium SAND, trace coarse Sand, wet, loose	3.2
+12				Bottom of Boring at 12' No Recovery Macro tube down hole	
16	·				
† † †	_				
20					
. 					
24					
Comment	<u> </u>				<u> </u>
~vmmm.	J•				

Project: X-307 Add. Inv. Rubble Piles Start Date Boring ID LEA Comm No: 68V7069 07/25/97 Client: Pratt & Whitney **End Date** SK-SB-199 Location: East Hartford 07/25/97 Logged By: **Drilling Contractor:** LEA95 B. Tomicic Drilling Method: Geoprobe Drilling Foreman: D. Brisson Drill Rig: Geoprobe 4500 Sampling Method: Macro Core Surface Elevation: **Groundwater Observations:** Northing: Hours Depth: NR Easting: Hours At: Depth: Sample Information Sample Description PD/FID (PPM) Color, Prim. Grain Size, Sec. Grain Sizes, Elevation/ Depth Sample No. Recovery (لا) Blows Moist, Sort, Spher, Angul, Sed Struct, Density, Cohesive 0.0 1639065 62 Top 2": COBBLES, brown, fine SAND, some(-) medium Sand, loose 1639066 1639067 0.0 Top 3": Black, fine SAND, trace(+) medium Sand, loose, poorly sorted, brown, fine Sand, medium Sand, loose 0.0 1639068 75 As Above; mottled at bottom 0.0 1639069 Grey, brown, medium SAND and fine Sand, moist, loose, poorly sorted 1639070 0.0 As Above; wet 0.0 1639071 As Above; light brown 12 0.0 1639072 100 Top 14": As Above; Bottom 10": Olive-grey, varved CLAY, dense Printed On: 9/11/1997 0.0 1639073 As Above 16 Bottom of Boring 16' 20 24 Boring Comments: Z O

X-307 Add. Inv. Rubble Piles Project: LEA Comm No: 68V7069 Client: Pratt & Whitney

Location: East Hartford

Drilling Contractor: LEA95 Drilling Method: Sampling Method: Geoprobe Large Bore

Groundwater Observations:

Depth: NR Depth:

At:

Hours

Start Date 07/25/97 **End Date** 07/25/97

Boring ID

SK-SB-200

Logged By: B. T Drilling Foreman: **B.** Tomicic

eman: D. Brisson Geoprobe 4500

Drill Rig: Geopr Surface Elevation:

Northing: Easting:

	San	nple Informat	ion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (な)	Blows ⁄6°	Color, Prim. Grain Size, Sec. Grain Sizes, Moist, Sort, Spher, Angul, Sed Struct, Density, Cohesive	PID/FID (ppm)
10	1639074	75		Top 4": Organic matter and COBBLES, Bottom 14": Brown/black, fine SAND, trace (-) medium Sand, dry, loose, poorly sorted	0.0
‡	1639075	62		Top 8": As Above; brown, fine SAND, some(-) Silt, moderately dense; Bottom 2": mottled	0.0
+4	1639076	71		Brown, fine SAND, trace(-) Silt, loose, poorly sorted	0.0
† † †	1639077	71		Top 4": As above; moist, brown/grey, fine SAND, some(+) medium Sand, wet, poorly sorted	0.0
+8	1639078	75		As Above	0.0
† †	1639079	79		As Above	0.0
+12	1639080	96		Top 19": As Above; Bottom 4": Olive-grey, verved CLAY, dense	0.0
† †				Bottom of Boring 14'	
16					
20					
†				·	
+24					

(jar packed with no headspace for VOC analysis.



Printed On: 9/11/1997

Boring ID

SK-SB-201

Project: X-307 Add. Inv. Rubble Piles

LEA Comm No: 68V7069

Client: Pratt & Whitney

Location: East Hartford

Client: Practic Add. Inv. Rubble Piles

Ctart Date

07/28/97

End Date

07/28/97

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:

Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:

Depth: NR At: Hours ☐ Northing: Easting:

Depth: NR Depth:		At: At:	Hours \	Fasting:	
	San	nple Informat	ion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Prim. Grain Size, Sec. Grain Sizes, Moist, Sort, Spher, Angul, Sed Struct, Density, Cohesive	PID/FID (mpq)
10	1639081	76		Top 2": Process stone, coarse GRAVEL, trace fine Gravel; Bottom 34": Yellowish brown to light yellowish brown, fine SAND, trace medium Sand, trace Silt, dry to slightly moist, loose	0.0
4	1639083 1639084 1639085	54	1	Top 5": Yellowish brown, fine to very fine SAND, trace Silt, slightly moist, loose; Middle 4": Light yellowish brown, fine to medium SAND, slightly moist, loose; Bottom 11": Same as top 5": moist, loose	0.0
8	1639086	42		Top 6": Dark brown, SILT, trace organic matter, wet, loose; Bottom 14": Greyish brown to grey, SILT, little fine Sand, wet, loose; trace organic matter	0.0
‡	1639087			Wot, 10036, dado organio matter	0.0
12	1639088	88		Top 8": Yellowish brown, fine SAND, trace medium Sand, trace organic matter, wet, loose; Middle 22": Greyish brown, fine(+) to very fine Sand, wet, loose; Bottom 12":	0.0
‡	1639089			Yellowish brown, fine to coarse SAND, wet, loose	0.0
16				Bottom of Boring at 16'	
20					
24					
Comments:					

X-307 Add. Inv. Rubble Piles art Date Project: **Boring ID LEA Comm No:** 68V7069 07/28/97 Client: Pratt & Whitney **End Date** SK-SB-202 Location: East Hartford 07/28/97 Logged By: **Drilling Contractor: LEA** J. Trzaski Drilling Method: Geoprobe Drilling Foreman: D. Brisson Sampling Method: Macro Core Drill Rig: Geoprobe 5400 Surface Elevation: **Groundwater Observations:** Depth: Hours Northing: At: Hours Depth: Easting: At: Sample Information Sample Description PID/FID (ppm) Color, Prim. Grain Size, Sec. Grain Sizes, Elevation/ Depth Sample No. Recovery Moist, Sort, Spher, Angul, Sed Struct, Density, Cohesive o 1639091 2.0 Top 3": Organic debris; Bottom 29": Yellowish brown to strong brown, fine SAND, trace Silt, trace medium Sand, dry to slightly moist, loose, trace process stone, fine and coarse Gravel top 5" 1639092 2.0 1639093 1.5 Top 23": Strong brown, fine(+) to very fine SAND, trace Silt, trace medium Sand, slightly moist to moist, loose 1639094 1.5 1639095 75 1.1 Top 5": Yellowish brown, fine to medium SAND, trace Silt, moist, loose; Next 4": Reddish brown, fine to very fine SAND, moist, loose; Next 12": Light yellowish brown, fine SAND, trace medium Sand, moist to wet, loose; Bottom 1639096 0.9 15": Yellowish brown, fine SAND, trace medium Sand, wet, loose 12 4.5 1639097 67 Top 22": Brown, fine to very fine SAND, wet, lo9ose; Bottom 10": Brown, fine(+) to medium SAND, trace coarse Sand, wet, loose 1639098 4.2 Printed On: 11/14/1997 16 Bottom of Boring at 16' 20 Comments:

Depth:

Project: X-307 Add. Inv. R LEA Comm No: 68V7069 X-307 Add. Inv. Rubble Piles Client: Pratt & Whitney Location: East Hartford Drilling Contractor: Drilling Method: Sampling Method: Geoprobe Macro Core Groundwater Observations:

Hours

Start Date 07/28/97 End Date 07/28/97

Boring ID

SK-SB-203

Logged By: J. Trzaski
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation: J. Trzaski nan: D. Brisson

Depth:		At: At:	Hours Hours	Northing: Easting:	
	San	nple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Prim. Grain Size, Sec. Grain Sizes, Moist, Sort, Spher, Angul, Sed Struct, Density, Cohesive	PID/FID (ppm)
	1639099 1639100	67		Top 5": Brown, fine SAND, trace Silt with fine and coarse process stone Gravel, little organic matter; Bottom 27"; Brown, fine to very fine SAND, trace Silt, trace medium Sand, dry to slightly moist, loose to moderately dense	2.1
4	1639101	75		Brown, fine to very fine SAND, trace to little Silt, slightly moist to moist, loose to moderately dense, occasional black staining at 12-16", orange modeling t 24-36'	3.6
8	1639103	62		Yellowish brown to greyish brown, fine to medium SAND grading to fine to medium SAND, trace coarse Sand, moist to wet, loose	9.0
‡	1639104				7.,6
12	- 1639106	67		Top 6": Yellowish brown, fine to medium SAND, trace coarse Sand, wet, loose; Bottom 26": Brown to light olive3 brown, fine to very fine SAND, wet, loose, micaceous	8.0 4.1
16				Bottom of Boring at 16'	
† † †					
20					
24					
Comments	<u> </u>	1			<u> </u>

X-307 Add. Inv. Rubble Piles tart Date Project: **Boring ID** LEA Comm No: 07/28/97 68V7069 Client: Pratt & Whitney **End Date** SK-SB-204 Location: East Hartford 07/28/97 Logged By: **Drilling Contractor:** J. Trzaski LEA Drilling Method: Drilling Foreman: D. Brisson Geoprobe Drill Rig: Sampling Method: Macro Core Geoprobe 5400 Surface Elevation: Groundwater Observations: Depth: Hours Northing: At: Hours Easting: Depth: At: Sample Information Sample Description PID/FID (ppm) Color, Prim. Grain Size, Sec. Grain Sizes, Elevation/ Depth Sample No. Recovery (X) Blows Moist, Sort, Spher, Angul, Sed Struct, Density, Cohesive 1639107 3.0 75 Top 6": Brown, fine to medium SAND, trace Silt, trace process stone, fine and coarse Gravel, trace organic matter, dry, loose; Bottom 30": Yellowish brown, fine SAND, trace Silt, trace medium Sand, slightly moist, loose 1639108 2.4 58 1639109 Top 8": Same as above last 30"; Bottom 20": Strong 1.6 brown, fine to medium SAND, moist, loose 1639110 1.9 1639111 79 3.2 Top 4": Same as above last 20"; Next 6": Reddish brown, fine to very fine SAND, moist, loose; Next 8": Yellowish brown, fine SAND, trace medium Sand, moist, loose; Next 4": Grey, SILT, trace fine to very fine Sand, moist, loose; 1639112 1.9 Bottom 16": Greyish brown, fine to medium SAND, trace coarse Sand, wet, loose 12 2.3 1639113 79 Yellowish brown, fine(+) to medium SAND, trace coarse Sand, wet, loose 4.6 1639114 16 Bottom of Boring at 16' 20 Comments:

Printed On: 11/14/1997

X-307 Add, Inv. Rubble Piles Start Date Project: Boring ID 07/23/97 LEA Comm No: 68V7069 Client: Pratt & Whitney **End Date** SK-SB-205 Location: East Hartford 07/23/97 Logged By: J. Trzaski **Drilling Contractor:** LEA **Drilling Method:** Geoprobe Drilling Foreman: D. Brisson Sampling Method: Macro Core Drill Rig: Geoprobe 5400 Surface Elevation: **Groundwater Observations:** Depth: Hours Northing: Depth: At: Hours Easting: Sample Description Sample Information PID/FID (Ppm) Color, Prim. Grain Size, Sec. Grain Sizes, Elevation/ Depth Sample No. Blows Moist, Sort, Spher, Angul, Sed Struct, Density, Cohesive 1639033 25.3 Top 2": Organic debris; Middle 5": Yellowish brown, SILT with fine to very fine Sand, some organic matter, dry, loose; Bottom 35": Brownish yellow to pale brown, fine to very fine SAND, trace Silt, dry to slightly moist, loose, 1639034 1639035 23.2 trace organic matter 1639036 Top 4": Same as above last 35"; Next 5": Light yellowish brown, fine SAND, trace medium Sand, moist, loose; Next 3": Same as top 4"; Bottom 30": Light yellowish brown to yellowish brown, fine to medium SAND, trace coarse Sand, 1639037 moist to wet, loose, wet at 7' 1639038 Top 24": Yellowish brown, fine(+) to medium SAND, trace(-) coarse Sand, wet, loose; Bottom 12": Yellowish brown, medium to fine SAND, coarse Sand, wet, loose 1639039 12 1639040 Top 7": Yellowish brown, fine to medium SAND, trace(-) coarse Sand, wet, loose; Bottom 27": Grey, CLAY, little brown, fine to very fine Sand and Silt, wet, loose, thinly laminated Bottom of Boring at 16' 18 20 Comments:



Cryogenics Area Add. Inv. tart Date Project: **Boring ID LEA Comm No:** 68V7070 (30/97 Client: Pratt & Whitney Erl Date SK-SB-208 07/30/97 Location: East Hartford, CT LEA **Drilling Contractor:** Logged By: J. Trzaski D. Brisson Drilling Method: Drilling Foreman: Geoprobe Drill Rig: Geopr Surface Elevation: Sampling Method: Macro Core Geoprobe 5400 **Groundwater Observations:** Depth: Northing: At: Hours Easting: Hours Depth: At: Sample Information Sample Description Elevation/ Depth olor, Primary Grain Size, Secondary Grain Sizes, Sample No. Blows Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1639663 2.7 Punched thru 5" Asphalt; Top 5": Brown, fine to medium SAND, some process stone, fine and coarse Gravel, little asphalt pieces, dry, loose; Bottom 37": Yellowish brown, fine SAND, trace Silt, trace medium Sand, dry to moist, 1639664 2.5 loose: wet at bottom 3.2 1639665 Top 6": Greyish brown, fine SAND, trace medium Sand, wet, loose; Middle 8": Grey, SILT, with very fine to fine Sand, wet, moderately dense; Bottom 12": Same as top 6", trace Silt 1639666 2.8 3.0 1639667 83 Top 8": As Above, last 12"; Middle 12": Grey to greyish brown, fine to very fine SAND, wet, loose; Bottom 20": Greyish brown to yellowish brown, fine to medium SAND, trace coarse Sand, wet, loose 4.0 1639668 1639669 12 <u>1.1</u> 1639670 92 Top 5": As Above, last 20": Next 10": Light olive brown, fine to very SAND, wet, loose; Next 10": Yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose; Bottom 19": Grey, CLAY, trace very fine Sand and 1.3 1639671 Printed On: 1/26/1998 Silt, wet, moderately dense, thinly laminated 16 Bottom of Boring at 16' 20 24 Comments:

Project: Cryogenics Area Add. Inv. LEA Comm No: 68V7070 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor: LEA** Geoprobe

Drilling Method: Geopre Sampling Method: Macro Groundwater Observations: Macro Core

Depth:

At:

Hours

Start Date 07/30/97 End Date 07/30/97

Boring ID

SK-SB-209

Logged By: J. Trzaski
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation: D. Brisson

Depth: Depth:		At: At:	Hours 'Hours	Northing: Easting:	;
	San	nple Informati		Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1639672 1639673	62		Top 5": Brown, fine SAND, little Silt, trace medium and coarse Sand, trace organic matter, dry, loose; Bottom 25": Yellowish brown, fine SAND, trace coarse Sand, trace medium Sand, trace bituminous asphalt (top 8" of 25" interval) dry to moist, loose	2.4
+4	1639674 1639674	62		Top 14": Yellowish brown to greyish brown, fine SAND, trace Silt, trace medium Sand, moist to wet, loose (wet at 6"); Middle 4": Grey, SILT, with very fine to fine SAND; Bottom 12": Greyish brown, fine SAND, trace Silt, trace medium Sand, wet, loose	3.4
8	1639676	100		Top 6": Dark brown and black-stained, fine SAND, trace Silt, trace medium Sand, trace organic matter, wet, loose; Next 16": Greyish brown, fine SAND, trace medium Sand, wet, loose; Next 12": Greyish brown, fine to your fine SAND.	3.0
Ĭ	1639677			loose; Next 12": Greyish brown, fine to very fine SAND, wet, loose; Bottom 14": Yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose	2.8
+12	1 639678	75		Top 10": Light olive brown, fine to very fine SAND, wet, loose; Middle 18": Yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose; Bottom 8": Grey, CLAY, trace brown, fine to very fine Sand, wet, moderately dense,	1.4
16				thinly laminated	
†				Bottom of Boring at 16'	
20					
24					
					<u> </u>
Comments	::				
					-
LE				O ENGINEERING ASSOCIATES, PC	

Project: Cryogenics Area Add. Inv. LEA Comm No: 68V7070

Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:

Depth:

At:

Hours

Start Date 07/30/97 End Date 07/30/97

Boring ID

SK-SB-210

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:

Northing: Easting:

Depth:		At:	Hours	Easting:	
	San	nple Inform	ation	Sample Description	
Elevation/ Depth	Sample No.	Recovery (な)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
- 10 + + + + + + +	1639680	75		Top 6": Brown, fine SAND, little Silt, trace coarse Sand, trace concrete pieces, trace organic matter, dry, loose; Bottom 30": Yellowish brown, fine SAND, trace medium Sand, trace(-) Silt, dry to moist, loose	1.7
+4	1639682 1639683	75		Top 26": Yellowish brown, fine SAND, trace medium Sand, moist to wet, loose, wet at 10"; Middle 4": Grey, SILT, with fine and very fine Sand, wet, moderately dense; Bottom 6": Greyish brown, fine SAND, trace Silt, trace medium Sand, wet, loose	1.8
+8	1639684	96		Top 29": Yellowish brown to greyish brown, fine SAND, trace(-) medium Sand, wet, loose; Middle 5": Grey, fine to very fine SAND, wet, loose; Bottom 12": Yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose	1.6
† 12 † † † † †	1639686 1639687	83		Top 20": Light olive brown, fine to very fine SAND, wet, loose; Middle 12": Yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose; Bottom 8": Grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, moderately dense, thinly laminated	1.1
+16 + + + + + + + + +				Bottom of Boring at 16'	
+20 +					
Comments	5:				

Cryogenics Area Add. Inv. m No: 68V7070 Project: Start Date **Boring ID** LEA Comm No: 08/01/97 Client: Pratt & Whitney **End Date** SK-SB-211 Location: East Hartford, CT 08/01/97

Logged By: J. Trzaski
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing: **Drilling Contractor:** LEA Drilling Method: Sampling Method: Geoprobe D. Brisson Macro Core Groundwater Observations: Depth: NR At:

Hours

Depth: NF Depth:		At: At:	Hours Hours	Northing:			
	San	nple Informa					
Slevation/ Depth	Sample No.	Recovery (火)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)		
0	1639698 1639699	79		Top 6": Process stone, fine and coarse GRAVEL, little bituminous asphalt; Bottom 32": Yellowish brown, fine SAND, trace Silt, trace medium Sand, dry to slightly moist, loose; slight coarsening downward	3.2		
4	1639700 1639701	67		Top 16": As Above, Greyish brown, moist to wet; Middle 6": Grey, SILT, with fine to very fine Sand, wet, moderately dense; Bottom 10": Same as top 16", wet	2.2		
	1639702	75		Greyish brown to yellowish brown, fine to medium SAND, wet, loose	1.8		
†	1 6 39703 1639704				2.0		
12	1639705	79		Top 30": Yellowish brown, fine to medium SAND, trace coarse Sand, wet, loose; Bottom 8": Grey, CLAY, little fine to very fine Sand and Silt, wet, dense, thinly laminated	1.4		
	1639706				1.6		
+18 +				Bottom of Boring at 16'			
20							
24							
Comments:							

Project: Cryogenics Area Add. Inv. LEA Comm No: 68V7070

Client: Pratt & Whitney East Hartford, CT Location:

Drilling Contractor: LEA Drilling Method: Geopro Sampling Method: Macr Groundwater Observations: Geoprobe Macro Core

Depth: At:

art Date 08/01/97 End Date 08/01/97

Boring ID

SK-SB-212

J. Trzaski

Logged By: J. To Drilling Foreman: D. Brisson Geoprobe 5400

Drill Rig: Geopr Surface Elevation:

Depth:		At:	Hours	Easting:	
	San	nple Inform	ation	Sample Description	
Elevation/ Depth	Sample No.	Recovery (光)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm
0	1638707 1639708	67		Top 5": Process stone, fine and coarse GRAVEL, little bituminous asphalt; Bottom 27": Strong brown to yellowish brown, fine SAND, trace silt, trace medium Sand, dry to slightly moist, loose; slight coarsening downward	2.0
+4	1639709 1639710	58		Top 18": Yellowish brown to greyish brown, fine SAND, trace medium Sand, moist to wet, loose; Middle 5": Grey, SILT, with fine to very fine Sand, wet, moderately dense; Bottom 5": Greyish brown, fine(+) to very fine SAND, wet, loose	1.6
-8	1639711 1639712	83		Top 12": Greyish brown, fine SAND, trace medium Sand, wet, loose; Middle 12": Greyish brown to grey, fine to very fine SAND, wet, loose; Bottom 16": Yellowish brown to greyish brown, fine to medium SAND, trace coarse Sand,	2.1
12	1 639713 1639714	88		Top 14": Light olive brown, fine(+) to very fine SAND, wet, loose; Middle 18": Yellowish brown, fine to medium SAND, trace coarse Sand, wet, loose, slight coarsening downward; Bottom 10": Grey, CLAY, little fine to very fine Sand, wet,	1.5 0.8
16				dense, thinly laminated Bottom of Boring at 16'	
20					
24					
Comments	:		<u>]</u>	1	I

Project: Cryogenics Area Add. Inv. LEA Comm No: 68V7070 Start Date **Boring ID** 08/01/97 Client: Pratt & Whitney **End Date** SK-SB-213 Location: East Hartford, CT 08/01/97 Logged By: J. To Drilling Foreman: **Drilling Contractor:** LEA J. Trzaski Drilling Method: Geoprobe D. Brisson Drill Rig: Geoprobe 5400 Surface Elevation: Sampling Method: Macro Core Groundwater Observations: Depth: NR At: Northing: Hours

Depth:	At: Hours		Hours	Easting:	
Elevation/ Depth	Sample Information			Sample Description	
	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1639715 1639716	71		Top 4": Dark yellowish brown, SILT, trace fine Sand, trace organic matter, slightly moist, moderately dense; Bottom 26": Yellowish brown to reddish brown, fine SAND, trace medium Sand, trace coarse Sand, slightly moist, loose, Cobble at 30"	2.4
4	1639717 1639718	58		Top 14": Yellowish brown, fine SAND, moist to wet, loose; Next 3": Reddish brown, fine to very fine SAND, wet, loose; Next 3": Grey, SILT, with fine to very fine Sand, wet, moderately dense; Bottom 8": Greyish brown, fine SAND, wet, loose	1.5
+-8 + +	1639719	75		Top 26": Greyish brown, fine SAND, trace medium Sand, wet, loose; Middle 6": Grey to greyish brown, fine to very fine SAND, wet, loose; Bottom 4": Same as top 26"	1.5
‡	1639720				2.0
+12	1639721 1639722	83		Top 6": Light olive brown, fine to very fine SAND, wet, loose; Middle 24": Yellowish brown, fine to medium SAND, trace coarse Sand, wet, loose; Bottom 10": Grey, CLAY, trace fine and very fine Sand, wet, dense, thinly laminated	0.7
16				Bottom of Boring at 16'	
20					
-24					
Comments	:				<u> </u>

Depth:

Project: Linde Gas Add. Inv.

LEA Comm No: 68V7087

Client: Pratt & Whitney

Location: East Hartford, CT

Drilling Contractor: LEA

Drilling Method: Geoprobe

Sampling Method: Macro Core

Groundwater Observations:

Depth: At: Hours

At:

Hours

Start Date 08/06/97 End Date 08/06/97

Boring ID

SK-SB-214

Logged By: J. Trzaski Drilling Foreman: D. Brisson Drill Rig: Geoprobe 5400 Surface Elevation:

Northing: Easting:

Deptil.		11.	TIOTT 2	+ Easting.	_
	San	aple Informa	ition	Sample Description	
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
	1640122 1640123	75		Top 4": Asphalt pieces; Bottom 32": Yellowish brown to reddish brown, fine to medium SAND, trace coarse Sand, little fine and coarse Gravel (bottom 14"), slightly moist to moist, loose to moderately dense	1.4
+4	1640124	83		Top 30": Yellowish brown to greyish brown, fine SAND, trace Silt, trace medium Sand, moist to wet, loose, wet at 20"; Bottom 10": Greyish brown, fine to medium SAND, trace coarse Sand, wet, loose	2.0
‡	1640126				
+8 1	1640127	62		Top 18": Greyish brown to yellowish brown, fine(+) to medium SAND, wet, loose; Bottom 12": Yellowish brown, fine to medium SAND, trace(+) coarse Sand, wet, loose	1.3
 	1640128			Title to mediam chieb, dately 17 codise cand, wet, local	1.3
12	1640129	79		Top 16": Same as above last 12", trace(-) coarse Sand;	0.9
. † . † . † . †	1640130			Bottom 22": Grey, CLAY, trace brown fine and very fine Sand and Silt, wet, moderately dense, thinly laminated	1.0
+16				Bottom of Boring at 16'	
20					
-					
24					
‡					

Boring No: SK-SB-214

Comments:

<u> </u>		
Project: Linde Gas Add. Inv. LEA Comm No: 68V7087	Start Date 08/06/97	Boring ID
Client: Pratt & Whitney Location: East Hartford, CT	End Date 08/06/97	SK-SB-215
Drilling Contractor: LEA	Logged Ry	1 Trzaski

Drilling Method: Sampling Method: Drilling Foreman: D. Bris Drill Rig: Geoprobe 5400 Surface Elevation: Northing: D. Brisson Geoprobe Macro Core

Groundwater Observations: Depth: At: Hours

Depth:	At: Hours							
	San	nple Informa	tion	Sample Description				
Elevation/ Depth	Sample No.	Recovery (2)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)			
	1640131 1640132	88		Top 5": Grey, fine SAND, with bituminous asphalt, trace Silt, trace organic matter; Bottom 37": Reddish brown, fine to medium SAND, some fine and coarse Gravel, little coarse Sand, slightly moist to moist, moderately dense, Fill	1.4			
1	1640133 1640134	79		Top 27": Gey, fine to very fine SAND, trace Silt, trace(-) organic matter, moist to wet, dense to loose, wet at 25"; Middle 5": Reddish brown, very fine SAND, wet, loose; Bottom 7": Greyish brown, fine SAND, trace medium Sand, wet, loose	1.6			
	1640135 1340138	71		Greyish brown to yellowish brown, fine to medium SAND, trace(-) coarse Sand, wet, loose, slight coarsening downward, slight black staining at 20-34"	1.1			
12	1640137	71		Top 8": Yellowish brown, fine to coarse SAND, wet, loose; Middle 12": Yellowish brown, fine SAND, trace medium	1.0			
·	1640138			Sand, wet, loose, micaceous; Bottom 14": Grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, moderately dense, thinly laminated	0.9			
+16 + + + + + +				Bottom of Boring at 16'				
20								
24								
Ţ								

Linde Gas Add. Inv. Project: LEA Comm No: 68V7087 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA Drilling Method: Geopro Sampling Method: Macr Groundwater Observations: Geoprobe Macro Core Depth: At: Hours

Start Date 08/06/97 **End Date** 08/06/97

Boring ID

SK-SB-216

Logged By: J. Trzaski
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation: D. Brisson

Northing:

Depth:	oth: At: Hours ₹ Easting:					
	Sample Information			Sample Description		
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
0	1640139 1640140	88		Top 14": Yellowish brown, fine SAND, trace medium Sand, trace Silt, trace organic matter, slightly moist, loose; Bottom 28" Reddish brown, fine to medium SAND, some fine and coarse Gravel, little coarse Sand, slightly moist to moist, moderately dense, Fill	1.7	
+4	1640141	62		Same as above, last 28", moist to wet, wet at 20"	1.5	
†	1640142				1.8	
- 8	1640143	79		Top 8": Greyish brown, fine to medium SAND, trace(-) coarse Sand, wet, loose; Middle 20": Light olive brown, very fine SAND, wet, loose; Bottom 10": Yellowish brown, fine	1.9	
† †	1.640144			to medium SAND, trace coarse Sand, wet, loose	1.6	
+12	1640145	71	·	Top 17": Yellowish brown, fine to coarse SAND, wet, loose; Bottom 17": Grey CLAY, trace brown, fine to very fine Sand and Silt, wet, moderately dense, thinly laminated	1.1	
·	1640146				1.2	
16				Bottom of Boring at 16'		
20						
24						
Comments	5:					

Project: Linde Gas Add. Inv. Start Date **Boring ID** LEA Comm No: 68V7087 08/07/97 Client: Pratt & Whitney End Date SK-SB-217 Location: East Hartford, CT 08/07/97

Drilling Contractor: Drilling Method: Logged By: F. Po Drilling Foreman: F. Postma LEA Geoprobe D. Brisson Sampling Method: Maci Groundwater Observations: Drill Rig: Geoprobe 5400 Surface Elevation: Macro Core

Depth: 5.2 At: 0 Hours Northing:

Depth:		At:	Hours	Easting:	
	San	nple Informat	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
T°	1640162	90		Top 2': Brownish yellow, fine SAND, moist, loose; Bottom 0.7': Red, fine SAND, little coarse Sand, little medium Sand, trace fine Gravel, moist, moderately dense	7.8
†	1640163			Red to reddish brown, fine SAND, little coarse Sand, little medium Sand, trace fine Gravel, moist, moderately dense, petroleum(?) odor	18.7
+ ⁴	1640164	80		Top 6": As Above; 4.6-5.2': Olive, SILT, some fine Sand, moist, moderately dense, 5.2-7.0': Light olive brown, medium SAND, some fine Sand, trace coarse Sand, loose,	9.4
<u> </u>	1640165	-		As Above	9.7
+8	1640166	90		As Above	7.0
<u> </u>	1640167			Brown to olive brown, fine SAND, trace medium Sand, wet, moderately dense, stratified	11.0
+12	1640168	80		Top 1': As Above, mottles at 12.8-13.1; Bottom 0.8': Olive-brown to grey, CLAY, trace Silt, wet, loose, fine Sand lenses	4.6
Ī	1640169			As Above	4.7
16				Bottom of Boring at 16'	
20					
24					
Comment	rs:				<u> </u>

Project: Linde Gas Add. Inv. LEA Comm No: 68V7087 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA Drilling Method: Geopre Sampling Method: Macro Groundwater Observations: Geoprobe Macro Core

Depth: 5.1

At: 0

Hours

Start Date 08/07/97 End Date 08/07/97

Boring ID

SK-SB-218

Logged By: F. Postma
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation: D. Brisson

Northing:

Depth:	At: Hours		Hours	Easting:		
	San	ple Informa	tion	Sample Description		
Elevation/ Depth	Sample No.	Recovery (火)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
10	1640170	90		Top 6": Yellow, fine SAND, moist, loose; Bottom 1.4': Red to reddish yellow, medium SAND, some coarse Sand, little fine Gravel, little fine Sand, moist, moderately dense,	10.5	
I I	1640171 1640172	90		As Above	11	
+4	1640173 7	90		Top 8": As Above; Bottom 1.1': Olive brown, fine SAND, little medium Sand, wet, loose	16.5	
+	1640174	90		As Above	5.5	
8	1640175	80		As Above, Mottles at 9.6'	12.8	
Ī T	1640176	80		As Above	12.1	
12	1640177	40		As Above	14.5	
‡ ‡	1640178	40		Olive brown to grey, CLAY, wet, loose, rhythmites, fine Sand lenses	16.0	
+16 + + + +				Bottom of Boring at 16'		
20						
† † + +						
24						
Comments	<u> </u>					

Linde Gas Add. Inv. Project: LEA Comm No: 68V7087 Client: Pratt & Whitney East Hartford, CT Location:

Drilling Contractor: LEA Drilling Method: Geoprobe Sampling Method: Macro Core

Groundwater Observations:

Depth: 5.5 At: 0 Depth: At:

Hours

Hours

Start Date 08/07/97 **End Date** 08/07/97

Boring ID

SK-SB-219

Logged By: F. Postma
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400 D. Brisson

Surface Elevation:

Northing: Easting:

Sample No. 1640179	Recovery (%)	Blows /6"	Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
		Blows /6"	Moisture, Sorting, Sphericity, Angularity,	(ppm)
1640179	60			i
			Yellowish brown, fine SAND, little medium Sand, moist, loose	17.2
1640180	60		Red to brownish red, medium SAND, with fine Sand, trace coarse Sand, trace(-) fine Sand, moist, dense	17.3
1640181	80		Top 6": As Above; Bottom 1.1': Olive brown to brown, fine SAND, some medium Sand, trace coarse Sand, wet, loose, stratified, mottles, petroleum(?) odor	5.4
1640182	80		As Above, petroleum(?) odor	215
1640183	70		Brown to light brown, fine SAND, with medium Sand, trace coarse Sand, loose, wet, stratified	23.1
1640184	70		As Above	15.8
1640185	90		Yellowish brown, medium SAND, some coarse Sand, little fine Sand, wet, loose, stratified, subangular grains	10.9
1640186	90		Top 1.2': As Above; Bottom 0.7': Reddish brown to grey, CLAY, trace Silt, trace(-) fine Sand, wet, loose, rhythmites, fine Sand lenses	7.8
			Bottom of Boring at 16'	
	1640181 1640182 1640183 1640184	1640181 80 1640182 80 1640183 70 1640184 70 1640185 90	1640181 80 1640182 80 1840183 70 1640184 70	coarse Sand, trace(-) fine Sand, moist, dense Top 6": As Above; Bottom 1.1': Olive brown to brown, fine SAND, some medium Sand, trace coarse Sand, wet, loose, stratified, mottles, petroleum(?) odor As Above, petroleum(?) odor Brown to light brown, fine SAND, with medium Sand, trace coarse Sand, loose, wet, stratified As Above Yellowish brown, medium SAND, some coarse Sand, little fine Sand, wet, loose, stratified, subangular grains Top 1.2': As Above; Bottom 0.7': Reddish brown to grey, CLAY, trace Silt, trace(-) fine Sand, wet, loose, rhythmites, fine Sand lenses

Linde Gas Add. Inv. Project: **LEA Comm No: 68V7087** Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA Drilling Method: Sampling Method: Geoprobe Macro Core **Groundwater Observations:**

Depth: 2

At: 0

Hours

Start Date 08/07/97 **End Date** 08/07/97

Boring ID

SK-SB-220

Logged By: F. P. Drilling Foreman: F. Postma

D. Brisson Geoprobe 5400

Drill Rig: Geopr Surface Elevation:

Northing:

At: Hours	Easting:			
ple Information	Sample Description			
Recovery Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)		
90	Brown, medium SAND, some fine Sand, moist, loose, subangular	9.4		
90	Reddish brown to brown, fine SAND, with medium Sand, wet, loose	9.5		
60	Brown to olive black, medium SAND, some fine Sand, trace(-) Silt, wet, loose, sapric organic matter, Hydrogen Sulfide odor	7.2		
60	Light brown to reddish brown, medium SAND, little coarse Sand, little fine Sand, wet, loose, stratified	5.5		
70	Reddish brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose	27.0		
70	Light brown to olive brown, fine SAND, trace medium Sand, wet, moderately dense	12.9		
90	Reddish yellow, medium SAND, little coarse Sand, trace(+) fine Sand, wet, loose, subangular	9.6		
90	Top 8": As Above; Bottom 1': Olive to grey, CLAY, fine to coarse Silt, trace fine Sand, wet, loose, rhythmites, fine Sand lenses	11.6		
	Bottom of Boring at 16'			

Project: Linde Gas Add. Inv.

LEA Comm No: 68V7087

Client: Pratt & Whitney

Location: East Hartford, CT

Start Date 8/08/97

Boring ID

SK-SB-221

Drilling Contractor: LEA

Drilling Method: Macro Core
Sampling Method: Macro Core
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe

Groundwater Observations:
Depth:

At:

Hours

Depth: Hours Easting: At: Sample Description Sample Information Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Blows /6 Sample No. (X) ecoveri Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1640201 75 2.2 Drilled through 4" concrete; Top 2": Concrete debris; Middle 6": Dusky-red, fine to coarse SAND, trace fine and coarse Gravel, trace Silt, dry, loose; Bottom 28": Yellowish-brown, fine to medium SAND, trace Silt, slightly 1640202 2.6 moist to moist, loose 1640203 83 2.8 Top 8": Sames as last 28"; Bottom 32": Red, fine to coarse SAND, some fine and coarse Gravel, trace Silt, Cobble at 16", wet top 8", slightly moist bottom 24", moderately dense, yellow brick material at 16" 1640204 1640205 5.9 1640206 Top 18"; As Above last 32", Next 8" yellowish-brown, wet 83 2.6 bottom 10"; Bottom 12": Concrete 1640207 3.2 Refusal at 11.5' 12 Printed On: 2/10/1998 16 20 Boring Comments:

Project: Linde Gas Add. Inv. LEA Comm No: 68V7087 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA Drilling Method: Sampling Method: Macro Core DP **Macro Core Groundwater Observations:** Depth: Hours

tart Date 08/08/97 **End Date** 08/08/97

Boring ID

SK-SB-222

J. Trzaski Logged By:

J. Sweeton Drilling Foreman:

Drill Rig: Geoprobe Surface Elevation:

Northing:	
Easting:	

Depth:		At:	Hours				
	San	nple Informs	ition	Sample Description			
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)		
10	1690210 1690211	71		Punched through 3" Asphalt; Top 30": Yellowish-brown, fine to medium SAND, trace Asphalt pieces, little coarse Sand, trace Silt, slightly moist to moist, loose; Bottom 4": Dusky-red, fine to coarse SAND, little fine and coarse Gravel, trace Silt, moist, loose	4.1 3.7		
+4 + +	1690212	58		Top 26": As Above last 4", moist to wet, moderately dense, wet at 5"; Bottom 2": Concrete, strong petroleum(?) odor	3.6		
† † †	1690213				200		
+8				Refusal at 8'			
‡				·			
12							
. ‡							
16			·				
- - - - -							
20							
1				·			
+24			-				

Project: Linde Area Add. Inv. LEA Comm No: 68V7087 Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: Drilling Method: Sampling Method: Geoprobe Macro Core **Groundwater Observations:**

Depth:

Hours

Start Date 08/11/97 **End Date** 08/11/97

Boring ID

SK-SB-224

Logged By: J. Trzaski
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation: D. Brisson

Northing:

Depth:	At: Hours			₹ Easting:		
	Sar	nple Inform	ition	Sample Description		
Elevation/ Depth	Sample No.	Recovery (な)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
0	1640232	83		Drilled through 4" Concrete; Top 6": Concrete pieces and debris; Bottom 34": Dark yellowish-brown, fine SAND, little medium Sand, trace Silt, trace coarse Sand, slightly moist, loose, reddish-brown Cobble at 20", coal pieces at bottom 6"	NR NR	
+4 + + + + + + + + + + + + + + + + + +	1640234 1640235 1640236	83		Top 4": Same as last 34"; Bottom 36"; Red to reddish- brown, fine to coarse SAND, little fine and coarse Gravel, trace Silt, wet from 6-14", slightly moist, 14-36", moderately dense	NR NR NR	
+8	1640237 1640238	83		Top 20": Same as last 36"; next 4": Brown, fine(+) to medium SAND, wet, loose; next 8": Greyish-brown, fine to very fine SAND, trace Silt, wet, loose; Bottom 8": Brown, fine SAND, little medium Sand, wet, loose	NR NR	
12	1640239 1640240	71		Top 32": Dark yellowish-brown, fine to very fine SAND, trace Silt, wet, loose; Bottom 2": Yellowish-brown, fine to coarse SAND, trace Silt, wet, loose	NR NR	
+16 + + + + +				Bottom of Boring 16'		
24						

Project: Linde Area Add. Inv. Star Date **Boring ID** 68V7087 08/11/97 End Date LEA Comm No: Client: Pratt & Whitney SK-SB-225 East Hartford, CT Location: 08/11/97 **Drilling Contractor:** LEA Logged By: J. Trzaski **Drilling Method:** Geoprobe Drilling Foreman: D. Brisson **Macro Core** Sampling Method: Drill Rig: Geoprobe 5400 **Groundwater Observations:** Surface Elevation: Depth: At: Hours Northing: Hours Depth: At: Easting: Sample Description Sample Information Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Sample No. Blows Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1640241 100 NR Drilled through 4" Concrete; Top 4": Concrete pieces and debris; Next 8": Reddish-brown, fine to coarse SAND, little fine and coarse Gravel, trace Silt, dry, loose; Bottom 36": Yellowish-brown, fine SAND, little medium Sand, trace 1640242 100 NR coarse Sand, trace, fine and coarse Gravel, dry to slightly moist, loose 1640243 NR Top 6": ;Yellowish-brown, fine to medium SAND, trace coarse Sand, trace Silt, moist to wet, loose; Bottom 28": Reddish-brown, fine to coarse SAND, little fine and coarse Gravel, trace Silt, wet; Top 8": Slightly moist; Bottom 20": 1640244 71 NR moderately dense 1640245 Top 10": Same as last 28", brown Quartz, Cobble at 6"; Next 20": Greyish-brown, fine SAND, little medium Sand, NR 88 trace Silt, wet, loose; Next 6": Grey, fine to very fine SAND, trace Silt; Bottom 5": Yellowish-brown, fine 1640246 NR RR SAND(-), trace fibric organic matter, wet, loose, micaceous 12 Refusal at 12' 16 20 24 Comments:

					Page 1 of 1
Project: LEA Com	Linde Area Add. Inv m No: 68V7087	۱.		Start Date 08/11/97	Boring ID
Client: P	Pratt & Whitney East Hartford, CT			End Date 08/11/97	SK-SB-226
Drilling Control Drilling Manual Sampling Groundwa Depth: Depth:	lethod: Geoprobe		포	Logged By: Drilling Forem Drill Rig: Go Surface Elevat Northing: Easting:	an: D. Brisson eoprobe 5400
Depth.	Sample Informa			Sample Description	
Thereins!			Color, Pri	mary Crain Size, Secondary	Grain Sizes

Depth:		At: At:	Hours Hours	Hortning:	
	San	nple Informa	tion	Sample Description	
levation/ lepth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1640249 1640250	100		Drilled through 3" Concrete; Top 2": Concrete pieces and debris; Middle 10": Reddish-brown, fine to medium SAND, little fine and coarse Gravel, trace coarse Sand, trace Silt, dry, loose; Bottom 36": Yellowish-brown, fine SAND, little medium Sand, trace coarse Sand, trace, fine and coarse Gravel, slightly moist, loose to medium dense	NR
+4	1640251 1640253	67		Top 8": Same as last 36", wet, loose; Bottom 24": Reddish-brown, fine to coarse SAND, little fine and coarse Gravel, trace Silt, wet; Top 12": moist; Bottom 12": moderately dense	NR NR
	1840254	71		Top 10": Same as last 24"; Bottom 24": Greyish-brown, fine(+) to very fine SAND, trace medium Sand, trace Silt,	NR
‡	1640255			moist to wet, loose, wet at 14"; slightly finning downward, slightly petroleum(?) odor at bottom	NR
12	 		-	Refusal at 12'	
. ‡ ‡					
16					
20					
-24					
Comments	<u> </u>				<u> </u>

Linda Area Add. Inv. Drum Project: **LEA Comm No: 68V7088**

Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA Drilling Method: Geoprobe Sampling Method: Macro Core

Groundwater Observations:

Start Date 08/12/97 End Date 08/12/97

Boring ID

SK-SB-227

J. Trzaski

Logged By: J. To Drilling Foreman: Drill Rig: Geopre Surface Elevation: D. Brisson Geoprobe 5400

Depth: Depth:		At: At:	Hours Hours	Northing: Easting:	
	San	nple Informat	tion	Sample Description	
Clevation/ Depth	Sample No.	Recovery (2)	Blows ∕6°	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640379	96		Top 12": Yellowish brown, fine SAND, little Silt, trace fibric organic matter, dry, loose; Bottom 34": Yellowish brown, fine SAND, trace medium Sand, trace Silt, dry to slightly moist, loose	0
+4 + + + + + + + + + + + + + + + + + +	1640381 1640382 1640383	88		Top 10": As above last 34": Middle 20": Light yellowish brown, fine SAND, trace medium Sand, trace Silt, moist, loose; Bottom 12": Dark yellowish brown, fine to medium SAND, trace Silt, wet, loose	0
+8 +	1640384	83		Top 16": Dark yellowish brown, fine(+) to medium SAND, trace coarse Sand, trace Silt, wet, loose; Middle 16": Grey, fine to very fine SAND, little Silt, wet, loose; Bottom 8":	60.0
12	1640385			Same as top 16"	10.0
† ·- † †	1640386		•	Top 16": Yellowish brown, fine to coarse SAND, trace pea size Sand, trace Silt, wet, loose; Bottom 26": Grey, CLAY, little brown, fine to very fine Sand and Silt, wet to moist, moderately dense, varved	0
 16				Bottom of Borinbg at 16'	
20					
24				·	
comments	•				

Linda Area Add. Inv. Drum Project: LEA Comm No: 68V7088 Client: Pratt & Whitney

Location: East Hartford, CT **Drilling Contractor:** LEA

Drilling Method: Sampling Method: Geoprobe Macro Core

Groundwater Observations:

Depth: Depth:

Hours At: Hours

art Date 03/12/97 End Date 08/12/97

Boring ID SK-SB-228

Logged By: J. Trzaski
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation: D. Brisson

Northing: . Easting:

ocpia.		100	22000		
	San	npie Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640388 1640389	62		Top 5": Brown, SILT with fine Sand, some fibric organic matter, dry, loose; Middle 14": Reddish brown, fine to coarse SAND, little fine and coarse Gravel, trace Silt, dry, loose, Fill, 1/2" asphalt layer at bottom; Bottom 11": Brown, fine SAND, trace medium Sand, little Silt, slightly moist, loose	0
+4	1640390 1640391	75		Top 20": Yellowish brown, fine SAND, trace Silt, trace medium Sand, slightly moist to moist, loose; Bottom 16": Dark yellowish brown, fine(+) to medium SANBD, wet, loose	3.0
8	1640392 1640393	88		Top 28": Yellowish brown to greyish brown, fine to medium SAND, trace coarse Sand, wet, loose; Middle 6": Grey, fine to very fine SAND, little Silt, wet, loose; Bottom 8": Yellowish brown, fine(+) to medium SAND, wet, loose, slight iron staining	15.0
12	1640394 1640395	67	·	Top 18": Yellowish brown, fine to coarse SAND, trace fine Gravel, wet, loose, slight iron staining at top; Bottom 14": Grey, CLAY, trace brown fine to very fine Sand and Silt, wet, moderately dense, varved	0.2
16				Bottom of Boring at 16'	
24					
Comments	: :	<u> </u>			1

Project: Linda Area Add. Inv. Drum LEA Comm No: 68V7088 Client: Pratt & Whitney

Location: East Hartford, CT

Drilling Contractor: LEA Drilling Method: Geopro Sampling Method: Macr Groundwater Observations: Geoprobe Macro Core Hours ₹

Depth:

Start Date 08/12/97 **End Date** 08/12/97

Boring ID

SK-SB-229

J. Trzaski

Logged By: J. To Drilling Foreman: Drill Rig: Geopr Surface Elevation: D. Brisson Geoprobe 5400

Northing:

Depth:		At:	Hours	Easting:		
Elevation/ Depth	San	nple Informs	tion	Sample Description		
	Sample No.	Recovery (X)	Blows /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
0	1640396 1640397	79		Reddish brown, fine to coarse SAND, little fine and coarse Gravel, trace Silt, trace fibric organic matter (top 4"), dry to slightly moist, loose to moderately dense, Fill	0	
14	1640398	75		Light yellowish brown, fine(+) to very fine SAND, trace Silt (20") grading into yellowish brown, fine to medium Sand (16"), slightly moist to wet, loose, wet at 28"	0	
Ī	1640399				0.5	
+8	1640400	50		Top 10": Dark yellowish brown, fine to medium SAND, trace coarse Sand, wet, loose; Middle 8": Grey, fine to very fine SAND, little Silt, wet, loose; Bottom 6": Greyish brown,	20.0	
‡	1640401			fine(+) to medium SAND, wet, loose	25.0	
+12	1640402	50	-	Top 14": Yellowish brown, fine to coarse SAND, trace fine Gravel, wet, loose; Bottom 10": Grey, CLAY, trace fine to very fine Sand and Silt, wet, moderately dense, varved	0.0	
‡	1640403				3.0	
+ 16				Bottom of Boring at 16' .	_	
20						
24						
Comments	s:					

LOUREIRO ENGINEERING ASSOCIATES, PC

Linda Area Add. Inv. Drum Project: 68V7088 LEA Comm No: Client: Pratt & Whitney Location: East Hartford, CT Drilling Contractor: Drilling Method: Sampling Method: LEA Geoprobe

Start Date 08/12/97 **End Date** 08/12/97

Boring ID

SK-SB-230

Macro Core

Groundwater Observations:

Depth: Depth:

Hours Hours

Logged By: J. Trzaski
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation: D. Brisson

Northing: Easting:

Depth:	1	At:	Hours	₹ Easting:	
	San	aple Inform	ation	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
	1640405	88		Top 8": Pale brown, SILT with fine Sand, trace fibric organic matter, dry, loose; Bottom 34": Light yellowish brown to strong brown, fine SAND, little Silt, trace medium Sand, dry to slightly moist, loose	0
+4	1640406 1640407	75		Top 14": Grey to greyish brown, fine(+) to very fine SAND, little Silt, moist, loose, black-staining top 4"; Bottom 22": Yellowish brown, fine SAND, trace medium Sand grading to fine to medium Sand, wet, loose	0
8	1640408	62		Top 10": Greyish brown, fine to medium SAND, trace coarse Sand, wet, loose; Bottom 20": Grey, very fine to fine SAND, little Silt, wet, loose	6.0
12	1640410	92		Top 30": Dark greyish brown to ytellowish brown, fine to coarse SAND, trace fine Gravel, wet, loose; Bottom 14": Grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, moderately dense, varved	0
20				Bottom of Boring at 16'	
24					

Project: Linda Area Add. Inv. Drum LEA Comm No: 68V7088

Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA Drilling Method: Geopre Sampling Method: Macro Groundwater Observations: Geoprobe Macro Core

Depth:

At:

Hours Hours

Start Date 08/12/97 End Date 08/12/97

Boring ID

SK-SB-231

Logged By: J. Trzaski Drilling Foreman: D. Bris Drill Rig: Geoprobe 5400 D. Brisson

Surface Elevation: Northing: Easting:

Elevation/ Depth	Sample No. 1640412 1640413	Recovery (X) 83	Blaws /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness Top 4": Organic debris and concrete pieces; Middle 16": Pale brown, SILT with fine Sand, trace medium Sand, dry, loose; Bottom 20": Strong brown, fine SAND, trace medium Sand, trace Silt, slightly moist, loose	(ppm) O
Depth	1640412 1640413	83	Blaws /6"	Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness Top 4": Organic debris and concrete pieces; Middle 16": Pale brown, SILT with fine Sand, trace medium Sand, dry, loose; Bottom 20": Strong brown, fine SAND, trace medium	0
4	1640413			Pale brown, SILT with fine Sand, trace medium Sand, dry, loose; Bottom 20": Strong brown, fine SAND, trace medium	_
+4	1640414	60			
‡	1640415			Top 8": As above last 20"; Middle 10": Light brownish grey, fine to very fine SAND, little Silt, moist, loose; Bottom 6": Yellowish brown, fine(+) to medium SAND, trace fibric organic matter, wet, loose	0
+8	1640416	62		Top 14": Dark greyish brown, fine to medium SAND, trace coarse Sand, wet, loose; Middle 14": Grey, very fine to fine SAND, little Silt, wet, loose; Bottom 2": Grey, fine to medium SAND, trace coarse Sand, wet, loose	70.0 30.0
12	1640418	92	-	Top 24": Dark greyish brown to yellowish brown, fine to coarse SAND, trace fine Gravel, wet, loose; Bottom 20": Grey, CLAY, trace fine to very fine Sand and Silt, wet, moderately dense, varved	3.5 7.0
+16 + + + + + 20				Bottom of Boring at 16'	
24					
Comment	s:				

Groundwater Observations:

Project: Linda Area Add. Inv. Drum LEA Comm No: 68V7088 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA Drilling Method: Geoprobe Macro Core Sampling Method:

Shart Date 08/12/97 **End Date** 08/12/97

Boring ID

SK-SB-232

Logged By: J. To Drilling Foreman: J. Trzaski D. Brisson Drill Rig: Geoprobe 5400 Surface Elevation: Northing:

Sample Information Sample Information Sample Description	Depth: Depth:		At: At:	Hours Hours	¥ Northing: Easting:	
Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cobesiveness 1840420 92		Sar	mple Informat	tion	Sample Description	
Gravel, trace Silt, dry to slightly moist, loose to moderately dense, Fill 1840422 67 Top 14": Light brownish grey, fine to very fine SAND, little Silt, moist, loose; Bottom 18": Greyish brown, fine SAND, trace medium Sand, trace Silt, moist to wet, loose, wet at 6" 1840424 87 Top 14": Greyish brown, medium to fine SAND, trace coarse Sand, wet, loose; Middle 16" Grey, very fine to fine SAND, little Silt, wet, loose; Bottom 2": Grey, fine to medium SAND, trace coarse Sand, wet, loose 1840425 Top 14": Dark greyish brown to yellowish brown, fine to medium SAND, wet, loose; Bottom 26": Grey, CLAY, trace fine to very fine SAND and SiltT, wet, moderately dense, varved Bottom of Boring 16'		Sample No.	Recovery (X)	Bious ⁄6*	Moisture, Sorting, Sphericity, Angularity,	(ppm)
little Silt, moist, loose; Bottom 18": Greyish brown, fine SAND, trace medium Sand, trace Silt, moist to wet, loose, wet at 6" Top 14": Greyish brown, medium to fine SAND, trace coarse Sand, wet, loose; Middle 16" Grey, very fine to fine SAND, ittle Silt, wet, loose; Bottom 2": Grey, fine to medium SAND, trace coarse Sand, wet, loose Top 14": Dark greyish brown to yellowish brown, fine to medium SAND, wet, loose; Bottom 26": Grey, CLAY, trace fine to very fine SAND and SiltT, wet, moderately dense, varved Bottom of Boring 16'	0		92		Gravel, trace Silt, dry to slightly moist, loose to	
coarse Sand, wet, loose; Middle 16" Grey, very fine to fine SAND, little Silt, wet, loose; Bottom 2": Grey, fine to medium SAND, trace coarse Sand, wet, loose 12 1640426 83 Top 14": Dark greyish brown to yellowish brown, fine to medium SAND, wet, loose; Bottom 26": Grey, CLAY, trace fine to very fine SAND and SILT, wet, moderately dense, varved 16 Bottom of Boring 16'	4		67		little Silt, moist, loose; Bottom 18": Greyish brown, fine SAND, trace medium Sand, trace Silt, moist to wet, loose,	
Top 14": Dark greyish brown to yellowish brown, fine to medium SAND, wet, loose; Bottom 26": Grey, CLAY, trace fine to very fine SAND and SILT, wet, moderately dense, varved Bottom of Boring 16' Bottom of Boring 16'	8		67		coarse Sand, wet, loose; Middle 16" Grey, very fine to fine SAND, little Silt, wet, loose; Bottom 2": Grey, fine to	
18 Bottom of Boring 16'	- 12		83		Top 14": Dark greyish brown to yellowish brown, fine to medium SAND, wet, loose; Bottom 26": Grey, CLAY, trace	
-20	+16	1640427			varved	10.0
	† † † †					
	20					
	+ + 24 +					
Comments:	Comments	<u> </u> 5:			L	J

East Hartford, CT Drilling Contractor: Drilling Method: LEA Geoprobe Sampling Method: Macro Core

Groundwater Observations:

Start Date 08/13/97 **End Date** 08/13/97

Boring ID SK-SB-233 ...

Logged By: J. Trzaski
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation: D. Brisson

<u>_</u>	Recovery (x) 92 79	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness Top 6": Process stone, fine and coarse GRAVEL, with brown, fine Sand and Silt, trace organic matter; Bottom 38": Reddish brown, fine and coarse SAND, little fine and coarse Gravel, trace silt, trace Cobbles, dry to slightly moist, loose to moderately dense, Fill Top 26": Greyish brown, fine(+) to very fine SAND, little Silt, trace medium Sand, slightly moist to wet, loose, wet at 24"; Bottom 12": Reddish grey, fine(+) to medium SAND, trace(-) coarse Sand, wet, loose Reddish grey to grey, fine to medium SAND, trace coarse Sand, wet, loose, with 1" layer Grey, fine Sand at 8"	(ppm) 0 0 1.0
40469 40470 40471 40472 40473	79	Blows /6"	Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness Top 6": Process stone, fine and coarse GRAVEL, with brown, fine Sand and Silt, trace organic matter; Bottom 38": Reddish brown, fine and coarse SAND, little fine and coarse Gravel, trace silt, trace Cobbles, dry to slightly moist, loose to moderately dense, Fill Top 26": Greyish brown, fine(+) to very fine SAND, little Silt, trace medium Sand, slightly moist to wet, loose, wet at 24"; Bottom 12": Reddish grey, fine(+) to medium SAND, trace(-) coarse Sand, wet, loose Reddish grey to grey, fine to medium SAND, trace coarse	0 0
40470 40471 40472 40473	79		brown, fine Sand and Silt, trace organic matter; Bottom 38": Reddish brown, fine and coarse SAND, little fine and coarse Gravel, trace silt, trace Cobbles, dry to slightly moist, loose to moderately dense, Fill Top 26": Greyish brown, fine(+) to very fine SAND, little Silt, trace medium Sand, slightly moist to wet, loose, wet at 24"; Bottom 12": Reddish grey, fine(+) to medium SAND, trace(-) coarse Sand, wet, loose Reddish grey to grey, fine to medium SAND, trace coarse	0
40472 40473			Silt, trace medium Sand, slightly moist to wet, loose, wet at 24"; Bottom 12": Reddish grey, fine(+) to medium SAND, trace(-) coarse Sand, wet, loose Reddish grey to grey, fine to medium SAND, trace coarse	1.0
40474	29	·	Reddish grey to grey, fine to medium SAND, trace coarse Sand, wet, loose, with 1" layer Grey, fine Sand at 8"	6.0
	ļ			-
40476 40477	54		Top 6": Greyish brown, fine to coarse SAND, wet, loose; Middle 14": Greyish brown, fine(+) to medium SAND, trace(-) coarse Sand, wet, loose; Bottom 6": Grey, CLAY, trace browned, very fine to fine Sand and Silt, wet, moderately	0.6
			dense, varved Bottom of Boring at 16'	

Linde Area Add. Inv. UST 68V7089 LEA Comm No: Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA Drilling Method: Sampling Method: Geoprobe Macro Core **Groundwater Observations:**

Depth: Depth:

At:

Hours

art Date 08/13/97 **End Date** 08/13/97

Boring ID SK-SB-234

Logged By: J. Trzaski
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing: D. Brisson

Depth:		At:	Hours	₹ Easting:	
	San	nple Inform	ation	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
	1640479	88	·	Top 2": Organic debris and wood chips; Bottom 40": Reddish brown, fine to coarse SAND, some fine and coarse Gravel, trace silt, trace Cobbles, dry and slightly moist, loose to moderately dense, Fill	0
+4	1640480 1640481	75		Top 12": Greyish brown, fine(+) to very fine SAND, trace Silt, moist, loose; Next 3": Orange-stained, fine to medium SAND, moist, loose; Next 2": Same as top 12"; Bottom 19": Reddish grey, medium to fine SAND, trace coarse Sand, wet, loose	0.2
+8 + + + + +	1640482 1640483	58		Top 6": Reddish grey, fine SAND, little medium Sand, wet, loose; Middle 8": Reddish grey, fine to coarse SAND, to fibric organic matter, trace fine Gravel, wet, loose; Bottom 14": Olive grey, fine SAND, trace medium Sand, trace silt, wet, loose	3.5
+12	1640484 1640485	92	·	Top 24": Olive grey to dark olive grey, fine(+) to coarse SAND, wet, loose; Bottom 20": Grey, CLAY, trace brown, very fine to fine, Sand and Silt, wet, moderately dense, varved	7.0
20				Bottom of Boring at 16'	
Comment	5:				

Linde Area Add. Inv. UST Project: **LEA Comm No:** 68V7089 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA

Drilling Method: Geoprobe Sampling Method: Macro Core **Groundwater Observations:**

Depth:

At:

Hours

Start Date 08/13/97 **End Date** 08/13/97

Bor

SK-SB-2

Logged By: J. T Drilling Foreman: J. Trzaski D. Brisson Drill Rig: Geopre Surface Elevation: Geoprobe 5400

Northing: Easting:

Depth:	<i></i>	At:	Hours	₹ Easting:	
	San	nple Inform	ation	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640486 1640487	88		Top 4": Process stone, fine and coarse GRAVEL, with brown, fine Sand and Silt, trace fibric organic matter; Bottom 38": Reddish brown, fine to coarse SAND, some fine and coarse Gravel, trace Silt, trace Cobbles, dry to slightly moist, loose to moderately dense, Fill	0
+4	1640488 1640489	83		Top 18": Light grey to light yellowish brown, fine to very fine SAND, little Silt, moist, loose; Bottom 22": Light yellowish brown, fine SAND grading to reddish grey, fine to medium SAND, trace coarse Sand, wet, loose	0.2
8	1640490	62		Top 10": Reddish grey, fine to coarse SAND, trace fine Gravel, wet, loose; Bottom 20": Olive grey, fine to medium SAND, trace Silt, trace coarse Sand, wet, loose	0.4
† † †	1640491				0.4
+12	1640492	88		Top 32": Dark grey, fine(+) to coarse SAND, wet, loose; Bottom 10": Grey, CLAY, trace brown, very fine to fine Sand and Silt, wet, moderately dense, varved	1.0
† †	1640493				2.0
+16 + + + + + +				Bottom of Boring at 16'	
20					
24					
Comment	s:				

Linde Area Add. Inv. UST 68V7089 LEA Comm No: Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: Drilling Method: Sampling Method: LEA Geoprobe Macro Core **Groundwater Observations:**

Depth:

Start Date 08/13/97 **End Date** 08/13/97

Boring ID

SK-SB-236

Logged By: J. Trzaski
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation: D. Brisson

Northing:

Depth:	Ī	At:	Hours	Easting:	
<u>=</u>	San	nple Inform	etion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (と)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1640494 1640495	83		Cored through 6" concrete; Top 3": Concrete debris and pieces; Middle 35": Reddish brown, fine to coarse SAND, some fine and coarse Gravel, trace Silt, dry to slightly moist, loose to moderately dense, Fill; Bottom 2": Grey, SILT, with fine to very fine Sand, trace fibric organic matter, moist, moderately dense	0
+4	1640496 1640497	75		Top 16": Light grey to light yellowish brown, fine to very fine SAND, little Silt, moist, loose; Next 4": Orange-stained, fine to medium SAND, moist, loose; Next 2": Same as top 16", brown; Bottom 14": Reddish grey, fine to medium SAND, trace coarse Sand, wet, loose	0.9
+8	1640498	46		Top 19": Reddish grey to brownish grey, fine to medium SAND, trace coarse Sand, wet, loose; Bottom 3": Olive grey, fine SAND, trace Silt, trace medium Sand, wet, loose	0.4
†	1640499				0.8
+12	1640500	42		Top 12": Dark grey, fine(+) to coarse SAND, trace Silt, trace fine Gravel, wet, loose; Middle 2": Dark grey, fine to medium SAND, wet, loose; Bottom 6": Grey, CLAY, trace	0.6
	1640501			brown, very fine to fine Sand and Silt, wet, moderately dense, varved	1.0
+16				Bottom of Boring at 16'	
20					
24					
Comments	s:				

Project: Linde Area Add. Inv. UST
LEA Comm No: 68V7089
Client: Pratt & Whitney
Location: East Hartford, CT
Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours

Start Date 08/13/97 End Date 08/13/97

Boring ID SK-SB-237

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:

Northing: Easting:

Depth:	_	At:	Hours	Easting:	
	Sar	npie Informa	ition	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
	1640502 1640503	79		Top 6": Process stone, fine and coarse GRAVEL, with brown, fine Sand and Silt, trace organic matter; Bottom 32": Reddish brown, fine to coarse SAND, little fine and coarse Gravel, trace Silt, dry to slightly moist, loose to moderately dense, Fill	0
+4	1640504 1640505	75		Top 6": Greyish brown, fine to very fine SAND, little Silt, moist, loose; Next 5": Light yellowish brown, fine SAND, trace medium Sand, moist, loose; Next 8": Same as top 6"; Bottom 17": Reddish grey, fine to medium SAND, trace coarse Sand, wet, loose	0.4
8	1640506 1640507	58		Top 23": Reddish grey, fine to medium SAND, trace coarse Sand, trace silt, with 5" layer fine Sand, trace medium Sand at 7", wet, loose; Bottom 5": Olive brown, fine to very fine SAND, trace Silt, wet, loose	1.0
+12 + + + + + +	1640508 1640509	100		Top 32": Dark grey, fine(+) to coarse SAND, trace fine Gravel, wet, loose; Bottom 16": Grey, CLAY, trace very fine to fine Sand and Silt, wet, moderately dense, varved	5.0
				Bottom of Boring at 16'	
Comments	s:				

Depth:

Depth:

Project: Linde Area Add. Inv. UST
LEA Comm No: 68V7089
Client: Pratt & Whitney
Location: East Hartford, CT
Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:

Geoprobe
Macro Core
ations:
At:
Hours
At:
Hours

Start Date 08/13/97 End Date 08/13/97

Boring ID

SK-SB-238

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:

Northing: Easting:

Elevation/ Color, Primary Grain Size, Secondary Grain Sizes,	рерш:		11.	110013		
Supple S		San	nple Inform	ation	Sample Description	
brown, fine Sand and Silt, trace organic matter; Bottom 32": Reddish brown, fine to coarse SAND, little fine and coarse Gravel, trace Silt, dry to slightly moist, moderately dense, Fill 1840512 82 Top 6": Greyish brown, fine to very fine SAND, little Silt, moist, loose; Middle 10": Light yellowish brown, fine SAND, trace Silt; Bottom 14": Reddish grey, fine to medium SAND, trace Silt, wet, loose 1840514 71 Top 24": Same as above last 14", trace coarse Sand; Bottom 10": Olive grey, fine(+) to very fine SAND, trace Silt, wet, loose 1840515 Top 30": Dark grey, fine(+) to medium SAND, trace coarse Sand, trace Silt, wet, loose; Bottom 8": Grey, CLAY, trace brown, very fine to fine Sand and Silt, wet, moderately dense, varved Bottom of Boring at 16'	Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Moisture, Sorting, Sphericity, Angularity,	(ppm)
Fill Top 6": Greyish brown, fine to very fine SAND, little Silt, moist, loose; Middle 10": Light yellowish brown, fine SAND, trace Silt; Bottom 14": Reddish grey, fine to medium SAND, trace Silt, wet, loose 1840513 Top 24": Same as above last 14", trace coarse Sand; Bottom 10": Olive grey, fine(+) to very fine SAND, trace Silt, wet, loose 1840515 Top 30": Dark grey, fine(+) to medium SAND, trace coarse Sand, trace Silt, wet, loose; Bottom 8": Grey, CLAY, trace brown, very fine to fine Sand and Silt, wet, moderately dense, varved Bottom of Boring at 16'	0		75		brown, fine Sand and Silt, trace organic matter; Bottom 32": Reddish brown, fine to coarse SAND, little fine and coarse	_
moist, loose; Middle 10": Light yellowish brown, fine SAND, trace Silt; Bottom 14": Reddish grey, fine to medium SAND, trace Silt, wet, loose 1840514 71 Top 24": Same as above last 14", trace coarse Sand; Bottom 10": Olive grey, fine(+) to very fine SAND, trace Silt, wet, loose 1.3 Top 30": Dark grey, fine(+) to medium SAND, trace coarse Sand, trace Silt, wet, loose; Bottom 8": Grey, CLAY, trace brown, very fine to fine Sand and Silt, wet, moderately dense, varved 18 Bottom of Boring at 16'	‡	10-0311				
Top 24": Same as above last 14", trace coarse Sand; Bottom 10": Olive grey, fine(+) to very fine SAND, trace Silt, wet, loose 1840515 Top 30": Dark grey, fine(+) to medium SAND, trace coarse Sand, trace Silt, wet, loose; Bottom 8": Grey, CLAY, trace brown, very fine to fine Sand and Silt, wet, moderately dense, varved Bottom of Boring at 16' Bottom of Boring at 16'	+ 4	1640512	62		moist, loose; Middle 10": Light yellowish brown, fine SAND, trace Silt; Bottom 14": Reddish grey, fine to medium SAND,	0
Bottom 10": Olive grey, fine(+) to very fine SAND, trace Silt, wet, loose 1.3 1.4 1.5 1.640616 79 Top 30": Dark grey, fine(+) to medium SAND, trace coarse Sand, trace Silt, wet, loose; Bottom 8": Grey, CLAY, trace brown, very fine to fine Sand and Silt, wet, moderately dense, varved Bottom of Boring at 16' 20 24	† †	1640513			trace Silt, wet, loose	0.8
Top 30": Dark grey, fine(+) to medium SAND, trace coarse Sand, trace Silt, wet, loose; Bottom 8": Grey, CLAY, trace brown, very fine to fine Sand and Silt, wet, moderately dense, varved Bottom of Boring at 16' Bottom of Boring at 16'	+8	1640514	71		Bottom 10": Olive grey, fine(+) to very fine SAND, trace	0.2
Top 30": Dark grey, fine(+) to medium SAND, trace coarse Sand, trace Silt, wet, loose; Bottom 8": Grey, CLAY, trace brown, very fine to fine Sand and Silt, wet, moderately dense, varved Bottom of Boring at 16' Bottom of Boring at 16'	† †	1640515			•	1.3
Bottom of Boring at 16'	+12 +	-	79		Sand, trace Silt, wet, loose; Bottom 8": Grey, CLAY, trace brown, very fine to fine Sand and Silt, wet, moderately	
Bottom of Boring at 16'	†	1040017		· -		
24	16				Bottom of Boring at 16'	
	20					
	† † †					
Comments:	24					;
	Comments	S:	_l	1	1	<u></u>
·						

Project: Linde Area Add. Inv. UST Start Date **Boring ID** LEA Comm No: 68V7089 Client: Pratt & Whitney 08/13/97 **End Date** SK-SB-239 Location: East Hartford, CT 08/13/97 Logged By: J. To Drilling Foreman: Drill Rig: Geopte Surface Elevation: Northing: Drilling Contractor: Drilling Method: Sampling Method: LEA J. Trzaski preman: D. Brisson Geoprobe 5400 Geoprobe Macro Core **Groundwater Observations:** Depth: Hours At:

Depth:	4	At:	Hours	₹ Easting:	
	Sar	nple Informs	ation	Sample Description	
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1640518 1640519	58		Top 6": Process stone, fine and coarse GRAVEL and brown, fine to coarse SAND, some Silt, trace organic matter; Bottom 22": Reddish brown, fine to coarse SAND, some fine and coarse Gravel, trace Silt, slightly moist, loose, Fill	0
+4	1640520 1640521	50		Top 4": Brown, fine to very fine SAND, little Silt, moist, loose; Next 8": Yellowish brown, fine Sand, trace medium Sand, trace Silt, moist to wet, loose; Next 2": Same as top 4"; Bottom 10": Reddish grey, fine to medium SAND, wet, loose	0.3
+8 + + + + + + + + + + + + + + + + + +	1640522 1640523	83		Top 4": Reddish grey, SILT, wet, loose; Middle 28": Reddish grey, fine(+) to medium SAND, trace coarse Sand, trace silt, wet, loose; Bottom 8": Olive grey, fine(+) to very fine Sand, trace silt, wet, loose	0.5
+12	1640524 1640525	79	·	Top 24": Dark grey, fine to coarse SAND, little fine Gravel, trace Silt, wet, loose; Bottom 14": Grey, CLAY, trace brown very fine to fine Sand and Silt, wet, moderately dense, varved	0.5
			,	Bottom of Boring at 16'	
Comments	<u> </u> 				

VPSA Outside Drum Storage and Quonset H m No: 68V7092 Project: LEA Comm No: Client: Pratt & Whitney Location: East Hartford, CT

Star Date 08/27/97 End Date 08/27/97

SK-SB-240

Boring ID

Drilling Contractor: Drilling Method: LEA Geoprobe Macro Core Sampling Method:

Groundwater Observations:

Depth: At: Hours Hours

Logged By: J. T Drilling Foreman: J. Trzaski D. Brisson Drill Rig: Geoprobe 5400 Surface Elevation:

Northing: Easting:

Depth:	At: Hours			₹				
	San	nple Informs	ation		Sample Description			
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"		Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)		
	1641444 1641445 1641446	79		sto 6": slig littl Bot	o 12": Greyish brown, fine SAND and SILT with process ne, fine and coarse Gravel, slightly moist, loose; Next Dark brown, SILT with fine Sand, trace medium Sand, htly moist, loose; Next 10": Strong brown, fine SAND, e Silt, trace medium Sand, slightly moist, loose; tom 10": Yellowish brown, fine(+) to medium SAND, htly moist, loose	0.0		
T-4	1641448	75		loo mo Silt	o 12": Yellowish brown, fine to medium SAND, moist, se; Next 8": Grey, SILT with fine to very fine Sand, ist, loose; Next 10": Reddish brown, fine SAND, little wet, loose; Bottom 6": Yellowish brown, fine to dium SAND, wet, loose, slight iron staining	0.4		
∔ 8	1641449	71				0.0		
† † † †	1641450			Mic	o 12": Brown, fine(+) to medium SAND, wet, loose; ddle 10": Greyish brown, very fine to fine SAND, wet, se; Bottom 12": Yellowish brown, fine to medium SAND, ce coarse Sand, trace Silt, wet, loose	0.0		
+12	1641451	92		T	- 41. Links alive house fine to madium CAND was	1.7		
† † † † †	1641452			loo we SA Silt	o 4": Light olive brown, fine to medium SAND, wet, se; Next 8": Light olive brown, fine to very fine SAND, t, loose; Next 8": Yellowish brown, medium to fine ND, wet, loose; Bottom 24": Grey, CLAY, little brown and fine to very fine Sand, wet, moderately dense, yed	1.8		
+ 16				Bot	ttom of Boring at 16'			
† † †	-							
20								
- 24								
+								
‡								
Commercia	1	11		L		<u> </u>		
Comments	S:							

Page 1 of 1 **VPSA Outside Drum Storage and Quonset** Start Date Project: Boring ID LEA Comm No: 68V7092 08/27/97 Client: Pratt & Whitney **End Date** SK-SB-241 Location: East Hartford, CT 08/27/97 **LEA** J. Trzaski **Drilling Contractor:** Logged By: Drilling Foreman: Drilling Method: Geoprobe D. Brisson Drill Rig: Geoprobe 5400 Sampling Method: Macro Core **Groundwater Observations:** Surface Elevation: Depth: Hours Northing: At: Hours Easting: Depth: At: Sample Description Sample Information Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Sample No. Blows Depth Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 79 1641453 1.4 Punched through 3" asphalt; Top 12": Process stone, fine GRAVEL, with brown, Silt and fine Sand, trace coarse Gravel, slightly moist, loose; Middle 12": Strong brown, SILT with fine Sand, trace medium Sand, slightly moist, loose; black fibric organic matter at bottom; Bottom 14": 1641454 0.0 Yellowish brown, fine(+) to medium SAND, slightly moist, 67 1641455 0.0 Top 14": Brown, fine SAND, trace Silt grading to fine to very fine Sand, moist to wet, loose; Middle 5": Grey, SILT, some fine to very fine Sand, moist, moderately dense; Bottom 13": Grey to greyish brown, fine to very fine SAND, 1641456 0.0 trace Silt grading to fine Sand, wet, loose 8 0.4 1641457 79 Top 8": Brown, fine(+) to medium SAND, trace Silt, wet, loose; Next 7": Brown, fine to very fine SAND, wet, loose; Next 14": Same as top 8"; Bottom 9": Light olive brown, fine to very fine SAND, wet, loose 1.6 1641458 12 1641459 79 1.4 Top 24": Yellowish brown, fine(+) to coarse SAND, trace

Bottom of Boring at 16'

Sand, wet, dense, varved

fine Gravel, wet, loose, slight coarsening downward; Bottom 14": Grey, CLAY, little brown, Silt and fine to very fine

Comments:

24

16

20

0.2

Printed On: 2/13/1998

1641460

Project: VPSA Outside Drum Storage and Quonset H LEA Comm. No. 68V/092 Clicient: Pratt & Whitney Clearly Start Bate Clearly Clearly Pratt & Whitney Clearly Start Bate Clearly Clearly Pratt & Whitney Clearly Start Bate Date Clearly Clearly Pratt & Whitney Clearly Start Bate Date Clearly Clearly Pratt & Whitney Clearly Start Bate Date Clearly Clearly Pratter Bate Date Clearly Clear	·				rage roll	
Client: Prott & Whitney Location: East Hartford, CT Drilling Coutractor: LEA Drilling Foreman: Depth: At: Hours Drilling Foreman: Depth: At: Hours Drilling Foreman: Drilling Foreman: Drilling Foreman: Northing: Reading: Drilling Foreman: Drilling Foreman: Drilling Foreman: Drilling Foreman: Drilling Foreman: Northing: Read Date Drilling Foreman: Drilling Foreman: Drilling Foreman: Drilling Foreman: Northing: Read Date Drilling Foreman: Drilling Foreman: Drilling Foreman: Northing: Read Date Drilling Foreman: Drilling Foreman: Drilling Foreman: Northing: Read Date Drilling Foreman: Drilling Foreman: Northing: Read Date Drilling Foreman: Drilling Foreman: Northing: Read Date Drilling Foreman: Northing: Read Date Drilling Foreman: Drilling Foreman: Northing: Read Date Read By: J. Traskl Drilling Foreman: Northing: Read Date Read By: J. Traskl Drilling Foreman: Northing: Read Date Read By: J. Traskl Drilling Foreman: Northing: Read Date Read By: J. Traskl Drilling Foreman: Northing: Read Date Read By: J. Traskl Drilling Foreman: Northing: Read Date Read By: J. Traskl Drilling Foreman: Northing: Read Date Read By: J. Traskl Drilling Foreman: Northing: Reading: Reading: Reading: Reading: Reading: Reading: Reading: Reading: Reading: Reading: Reading: Reading: Reading: Reading: Reading:				n Storage a		D
December LEA Dece					Find Date	
Defiling Contractor: LEA Politing Method: Goprobe Sampling Method: Macro Core Groundwater Observations: At: Hours Sample Internation Northing: Easting: Restarting: Sample Description Northing: Easting: Restarting: Sample Description Northing: Easting: Restarting: Sample Description Northing: Easting: Restarting:						42
Sample Information Sample	Drilling Co Drilling M Sampling I Groundwa	ontractor: lethod: G Method: iter Observa	LEA eoprobe Macro (tions:	Core Hours	Logged By: J. Trzaski Drilling Foreman: D. Brisson Drill Rig: Geoprobe 5400 Surface Elevation: Northing:	
Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Spheridry, Angularity, Settineatary Structures, Density, Cohestveness Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Spheridry, Angularity, Cohestveness Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Spheridry, Cohestveness Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Spheridry, Cohestveness Color, Primary Structures, Density, Cohestveness of the Color, State of the Color, Sta		A	At:	Hours	Easting:	
Supple Section Single Recovery Moisture, Sorting, Sphericity, Cohesiveness Copent		Sam	nple Informa	tion	Sample Description	T
fine Gravel, slightly moist, loose; Middle 12": Strong brown, SiLT with fine Sand, slightly moist, loose; Bottom 20": Yellowish brown, fine(+) to medium SAND, trace Silt, slightly moist to moist, loose, punched through 3" asphalt 1641463 71 Top 10": Brown, fine SAND, moist, loose; Middle 6": Grey, SiLT, some fine to very fine SAND wet, moderately dense; Bo, tom 18": Grey to reddish brown, fine to very fine SAND, grading to fine SAND, wet, loose 1641465 67 Dark yellowish brown, fine(+) to medium SAND, trace Silt, wet, loose, brown, fine to very fine SAND at 20-26" 1641466 Top 26": Yellowish brown, fine(+) to coarse SAND, trace fine Gravel, wet, loose, slight coarsening downward; Bottom 22": Grey, CLAV, trace brown, Silt and fine to very fine Sand, wet, dense, varved Bottom of Boring at 16"		Sample No.	Recovery (X)	Blows /6"	Moisture, Sorting, Sphericity, Angularity,	(ppm)
SILT, some fine to very fine SAND wet, moderately dense; Bo,tom 18*: Grey to reddish brown, fine to very fine SAND, grading to fine SAND, wet, loose 1641465 67 Dark yellowish brown, fine(+) to medium SAND, trace Silt, wet, loose, brown, fine to very fine SAND at 20-26* 1641466 Top 26*: Yellowish brown, fine(+) to coarse SAND, trace fine Gravel, wet, loose, slight coarsening downward; Bottom 22*: Grey, CLAY, trace brown, Silt and fine to very fine Sand, wet, dense, varved Bottom of Boring at 16* Bottom of Boring at 16*			88		fine Gravel, slightly moist, loose; Middle 12": Strong brown, SILT wth fine Sand, slightly moist, loose; Bottom 20": Yellowish brown, fine(+) to medium SAND, trace Silt,	,
1641466 Top 26": Yellowish brown, fine(+) to coarse SAND, trace fine Gravel, wet, loose, slight coarsening downward; Bottom 22": Grey, CLAY, trace brown, Silt and fine to very fine Sand, wet, dense, varved Bottom of Boring at 16' Bottom of Boring at 16'	1		71		SILT, some fine to very fine SAND wet, moderately dense; Bo,tom 18": Grey to reddish brown, fine to very fine SAND,	
Top 26": Yellowish brown, fine(+) to coarse SAND, trace fine Gravel, wet, loose, slight coarsening downward; Bottom 22": Grey, CLAY, trace brown, Silt and fine to very fine Sand, wet, dense, varved Bottom of Boring at 16' Bottom of Boring at 16'	+8 + +		67			
20	+12 +		100		fine Gravel, wet, loose, slight coarsening downward; Botton 22": Grey, CLAY, trace brown, Silt and fine to very fine	ו
	16				Bottom of Boring at 16'	
Comments:						
Comments:	Ţ					
Comments:	<u> </u>				<u> </u>	.1
	comment	s:				

LEÀ Com		3V7092 tney tford, CT		nd Quonse F	08/27/97 End Date 08/27/97	Boring II SK-SB-24	
Drilling M Sampling 1	Method: ter Observa	At: At:	Core Hours Hours		Drilling Forem Drill Rig: Ge Surface Elevati Northing: Easting:	oprobe 5400	
Elevation/ Depth	Sample No.	Recovery	Blows · /6"	Mo	Sample Description Primary Grain Size, Secondary oisture, Sorting, Sphericity, Ang mentary Structures, Density, Co	ularity,	(ppm)
10	1641469	62	·	coarse SANI Middle 14": trace mediun	" concrete; Top 4": Dusky re D, trace Silt, trace fine Gravel, Brown to strong brown, fine n Sand, slightly moist, loose; own, fine to medium SAND, s	dry, loose; SAND with Silt, Bottom 12":	8.7
+4	1641471 1641472	54		Middle 8": G	wn, fine(+) to very fine SAND frey, SILT with fine to very find dense; Bottom 12": Same as t	e Sand, wet,	11.1
8	1641473	67		Sand, wet, le	own, fine(+) to medium SANI oose; Middle 13": Brown, fine loose; Bottom 5": Same as to	to very fine	10.5
+12	1641475 1641476	83		loose; Middle trace fine Gr Bottom 14":	tht olive brown, fine to very fine 16": Yellowish brown, fine avel, slight coarsening down, Grey, CLAY, trace brown, Sivet, dense, varved	to coarse SAND, wet, loose;	9.6
+16	-			Bottom of B	oring at 16'		
-20							
+ 24 + 7							
Comment	s:						

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2/13/1998

Boring

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<-SB-244

VPSA Outside Drum Storage and Quonset Project: Start Date **Boring ID** 08/29/97 68V7092 LEA Comm No: Client: Pratt & Whitney **End Date** SK-SB-244 Location: East Hartford, CT 08/29/97 **LEA** Logged By: J. Trzaski **Drilling Contractor:** Drilling Foreman: **Drilling Method:** Geoprobe D. Brisson Sampling Method: Macro Core Drill Rig: Geoprobe 5400 Groundwater Observations: Surface Elevation: Ηð Northing: Depth: At: Hou Easting: Depth: At: Sample Description Sample Information Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Blows /6" Depth Sample No. Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1641486 88 Punched through 3" asphalt; Top 2": Black bituminous asphalt; Middle 30": Dark yellowish brown to brown fine 8.7 SAND, little Silt, trace fibric organic matter (top 12"), slightly moist, loose; Bottom 10": Light yellowish brown, 1641487 4.8 fine to medium SAND, slightly moist to moist, loose 75 15.5 1641488 Top 22": Brown, fine(+) to very fine SAND, trace Silt, trace medium Sand, moist to wet, loose; Bottom 14": Brown, fine(+) to medium SAND, wet, loose, slight iron staining 1641489 15.1 11.0 1641490 54 Brown, fine SAND, trace medium Sand, trace Silt, wet, 9.3 1641491 12 38.9 1641492 1641493 67 Top 20": Light olive brown, fine(+) to medium SAND grading to fine to coarse Sand (bottom 5"), wet, loose; Bottom 12": Grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved 10.4 1641494 16 Bottom of Boring at 16' 20 Comments:

Project: VPSA Outside Drum Storage and Quonset Start Date
LEA Comm No: 68V7092
Client: Pratt & Whitney
Location: East Hartford, CT

Delling Contractors: LEA

Location: Location: Lease Le

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:

Depth: At: Hours Hours Easting:

Depth:		At:	Hours	₹ Easting:			
	San	aple Informs	ation	Sample Description			
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)		
0	1641495 1641496	88		Top 2": Black asphalt; Next 5": Dusky red, coarse to fine SAND, little fine Gravel, trace coarse Gravel, slightly moist, loose; Next 12": Dark yellowish brown, fine to very fine SAND with Silt, moist, loose; Next 6": Dark brown to black, SILT, little fine Sand, little fibric and hemic organic matter, moist, loose; Bottom 17": Greyish brown, fine SAND, trace Silt, trace medium Sand, moist, loose	8.9 10.5		
74	1641497 1641498	54		Top 12": Grey, fine(+) to very fine SAND, trace Silt, wet, loose; Bottom 14": Grey to greyish brown, fine to medium SAND, wet, loose	12.3		
+8	1641499 1641500	67		Top 10": Brown, fine(+) to very fine SAND, wet, loose; Next 10": Yellowish brown, fine to coarse SAND, wet, loose; Next 8": Same as top 10"; Bottom 4": Light olive brown, fine to coarse SAND, wet, loose	14.6		
12	1641501 1641502	100		Top 8": Light olive brown, fine to very fine SAND, wet, loose; Middle 14": Light olive brown to yellowish brown, medium to fine SAND, wet, loose; Bottom 26": Grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved	23.3		
+16 				Bottom of Boring at 16'			
Comments	S:						

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2/13/1998

Boring

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K-SB-246

Start Date Project: VPSA Outside Drum Storage and Quonset **Boring ID** 68V7092 09/02/97 LEA Comm No: Client: Pratt & Whitney **End Date** SK-SB-246 Location: East Hartford, CT 09/02/97 Logged By: J. To Drilling Foreman: J. Trzaski **Drilling Contractor:** LEA Geoprobe Drilling Method: J. Sweeton Drill Rig: Geoprobe 5400 Sampling Method: Macro Core Surface Elevation: Groundwater Observations: Northing: Hours Depth: Hours Depth: At: Easting: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes. Elevation/ Depth Blows Sample No. Recover (X) Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness Punched through 2" asphalt; top 1": Grey, fine GRAVEL with asphalt pieces; Middle 14": Reddish brown, fine(+) to 15.4 1641505 75 coarse SAND, little fine Gravel, trace Silt, slightly moist, loose; Bottom 21": Dark brown to greyish brown, fine SAND 1641506 93 with Silt, trace fibric and hemic organic matter, moist, loose, slight petroleum(?) odor 1641507 1641508 Top 12": Greyish brown, fine to very fine SAND, little Silt, moist, loose; Middle 5": Grey, SILT, little fine to very 7.1 fine Sand, wet, moderately dense; Bottom 25": Greyish brown to reddish grey, fine SAND grading to fine to medium 6.9 1641509 SAND, moist to wet, loose 1641510 10.2 75 Top 30": Greyish brown, fine to medium SAND, trace(-) coarse Sand, trace Silt, wet, loose; Bottom 6": Light olive brown, fine to coarse SAND, wet, loose 67.2 1641511 12 7.0 1641512 Top 16": Yellowish brown, fine to coarse SAND, wet, loose; Bottom 12": Grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved 1641513 6.4 16 Bottom of Boring at 16'

Comments:

Page 1 of 1 VPSA Outside Drum Storage and Quonset Start Date Boring ID 09/02/97 LEA Comm No: 68V7092 Client: Pratt & Whitney **End Date** SK-SB-247 Location: East Hartford, CT 09/02/97 **Drilling Contractor: LEA** Logged By: J. Trzaski **Drilling Method:** Geoprobe Drilling Foreman: J. Sweeton Macro Core Drill Rig: Geoprobe 5400 Sampling Method: **Groundwater Observations:** Surface Elevation: Hours Depth: At: Northing: Hours Easting: Depth: At: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Recovery (X) Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1641514 3.6 Punched through 2" asphalt; Top 3": Grey process stone. fine and coarse Gravel, some fine to coarse Sand, trace asphalt pieces; Bottom 31": Dark yellowish brown, fine to very fine SAND, little Silt, fibric and hemic organic 1641515 4.4 matter, moist to wet, loose 1641516 100 Top 10": Same as above last 31", trace fibric and hemic 9.4 organic matter; Next 5": Grey, SILT, some fine to very fine Sand, wet, moderately dense; Next 8": Greyish brown, fine to very fine SAND, trace silt, wet, loose; Bottom 25": Reddish grey, fine(+) to medium SAND, wet, loose 1641517 6.1 1641518 79 9.3 Greyish brown to light olive brown, fine to coarse SAND, trace fine Gravel, wet, loose 8.0 1641519 12 1641520 10.1 Top 12": Dark yellowish brown, fine(+) to very fine SAND, wet, loose; Middle 5": Yellowish brown, medium to coarse SAND, wet, loose; Bottom 21": Grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved 1641521 5.2 Printed On: 2/13/1998 16 Bottom of Boring 16' 20

Comments:

24

Boring No: SK-SB-247

			A 47	·	
	VPSA Outside Drum n No: 68V7092	n Storage a	nd Quonset	Start Date 09/02/97	Boring ID
Client: Pi	ratt & Whitney East Hartford, CT	:/ <u>4</u>		End Date 09/02/97	SK-SB-248
Drilling Co Drilling Me Sampling N Groundwat Depth: Depth:	ethod: Geoprobe	Core Hours Hours	CP +	Logged By: J. Drilling Forema Drill Rig: Geo Surface Elevatio Northing: Easting:	n: J. Sweeton probe 5400
	Sample Informat	ion		Sample Description	
	<u> </u>		Colon Dia	com Chair Cias Cocondom (Service City

Depth: Depth:		At: At:	Hours	Easting:	
	Sam	nple Informs	ation	Sample Description	
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641522 1641523	79		Punched through 2" asphalt; Top 5": Grey, Process stone, fine and coarse Gravel with olive grey, fine to coarse Sand, dry, loose; Bottom 33": Dark yellowish brown, fine to y fine SAND with Silt, trace fibric organic matter throughout, trace hemic organic matter; Bottom 10": Slightly moist to moist, loose to moderately dense	3.3
+4	1641524 1641525	100		Top 6": Same as above last 10"; Next 10": Olive grey, fine to very fine SAND, little Silt, wet, loose; Next 4": Grey, SILT with fine to very fine Sand, wet, dense; Bottom 28": Reddish grey, fine SAND grading to fine to medium SAND, moist to wet, loose	3.5
+8	1641526	71		Yellowish brown, fine to medium SAND, trace coarse Sand, wet, loose	3.7
I	1641527				4.4
12	1641528	75		Top 14": Yellowish brown, fine(+) to coarse SAND, wet, loose; Bottom 22": Grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved	4.4
‡	1641529				2.8
+16	-14			Bottom of Boring at 16'	
-20					
† †					
-24					
Comments	:				1

			-	rage 1 of 1	
roject:			n Storage a	nd Quorse H Start Date Boring ID	
LEA Com		V7092		09/02/97	
	ratt & Whit			End Date SK-SB-24	Ω.
ocation:	East Hart			05/02/37	J
	ethod: G Method: ter Observa		Core	Logged By: J. Trzaski Drilling Foreman: J. Sweeton Drill Rig: Geoprobe 5400 Surface Elevation:	
Depth:		At:	Hours	₹ Northing:	
Depth:	A	At:	Hours	₹ Easting:	
	San	ple Informa	tion	Sample Description	
Devation/ Depth	Sample No.	Recovery (な)	Blows ∕6°	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
70	1641530	83		Punched through 3" asphalt; top 4": Grey, Process stone,	4.1
+	1641531			fine Gravel with olive brown, fine to medium Sand, trace asphalt pieces; Next 22": Dark yellowish brown, fine to very fine SAND with Silt, trace fibric organic matter, slightly moist to wet, loose; Next 5": Dark brown to black, SiLT, some hemic organic matter, trace fibric organic matter, wet, loose; Next 5": Olive grey, fine to very	4.0
+4	1641532	92		fine SAND and SILT, wet, moderately dense; Bottom 4":	5.1
† † † †	1641533			Light olive brown, fine SAND, wet, loose Top 10": Dark brown to black, fine to very fine SAND, with Silt, trace hemic organic matter, wet, loose, 1" layer asphalt at bottom; Next 5": Grey, SILT, little fine to very fine Sand, wet, dense; Bottom 29": Greyish brown, fine	2.2
+8	1011501	+		SAND grading to reddish grey, fine to medium SAND, wet,	
†	1641534	75		Brown, fine(+) to medium SAND, wet, loose, trace(-) coarse Sand	4.6
<u> </u>	1641535				4.8
12	1641536	83		Top 12": As Above, grading to fine to coarse SAND (bottom 3"); Bottom 28": Grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved	2.5
	1641537				2.3
+16		+		Bottom of Boring at 16'	
‡				Bottom of Boring at 10	
20					
Ī					
-24					
	1				
T2*					

Groundwater Observations:

Depth:

Project: VPSA Outside Drum Storage and Quonset H LEA Comm No: 68V7092 Client: Pratt & Whitney Location: East Hartford, CT LEA **Drilling Contractor: Drilling Method:** Geoprobe Sampling Method: Macro Core

At:

Hours

Start Date 09/03/97 **End Date** 09/03/97

Boring ID SK-SB-250

Logged By: J. Trzaski
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Northing:

Depth:	Ä	At:	Hours	Easting:		
	San	nple Informat	tion	Sample Description		
Elevation/ Depth	Sample No.	Recovery (X)	Blaws /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness		
0	1641541 1641542 1641543	83		Cored through 4" concrete; Top 4": Concrete pieces and debris; Middle 20": Dark yellowish brown, fine to very fine SAND, some Silt, trace brick pieces, wood pieces at 12", slightly moist, loose; Bottom 16": Strong brown, fine SAND, little Silt grading to reddish grey, fine(+) to medium Sand, slightly moist to moist, loose	7.8 11.3	
+	1641544 1641545	92		Top 10": Reddish grey, fine to very fine SAND, moist, loose; Next 5": Grey, SILT, some fine to very fine Sand, moist, moderately dense; Next 12": Reddish grey, fine to very fine SAND grading to fine SAND, wet, loose; Bottom 17": Yellowish brown, fine to medium SAND, wet, loose	9.8	
-8	1641546	75		Top 12": Brown, fine to very fine SAND, wet, loose; Bottom 24": Yellowish brown, fine to medium SAND, trace coarse Sand, wet, loose, iron staining throughout	6.5	
†	1641547				7.0	
+12 +	1641548	92		Top 10": Yellowish brown, fine to very fine SAND, wet, loose; Middle 8": Yellowish brown, fine(+) to coarse SAND, trace fine Gravel (at 3"), wet, loose; Bottom 26": Grey,	6.1	
1	1641549			CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved	3.8	
+16				Bottom of Boring at 16'		
† † †						
20						
24						
Comments	:	1		L	1	

Project: VPSA Outside Drum Storage and Quonset H LEA Comm No: 68V7092 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA Drilling Method: Geoprobe Sampling Method: Macro Core Groundwater Observations: Depth:

tart Date 09/03/97 **End Date** 09/03/97

Boring ID

SK-SB-251

J. Trzaski

Logged By: J. To Drilling Foreman: J. Sweeton Drill Rig: Geoprobe 5400 Surface Elevation:

Northing:

Sample	Recovery		Sample Description Color, Primary Grain Size, Secondary Grain Sizes,	
Sample No.	Recovery		Color, Primary Grain Size, Secondary Grain Sizes.	
	(%)	/6°	Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
1641550 1641551	83		Top 2": Organic debris and roots; Middle 34": Dark yellowish brown, fine to very fine SAND with Silt, little fibric organic matter, dry to slightly moist, loose, topsoil; Bottom 4": Pale brown, fine SAND, slightly moist, trace fibric organic matter, loose	1.8
1641552 1641553	92		Top 10": Light yellowish brown to brown, fine SAND grading to fine to very fine SAND, moist, loose; Next 5": Grey, SILT with fine to very fine Sand, wet, dense; Next 5": Brown, fine to very fine SAND, trace Silt, wet, loose; Bottom 24": Brown, fine(+) to medium SAND, wet, loose	5.0 5.3
1641554	75		Brown to yellowish brown, fine to medium SAND, trace coarse Sand, trace Silt, wet, loose, 5" layer medium to coarse Sand, trace fine Gravel from 22-28"	5.2
1641555				8.8
1641556 1641557	67		Top 18": Yellowish brown, fine(+) to coarse SAND (top 6") grading to fine SAND, wet, loose; Bottom 14": Grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved	5.6 4.1
 			Bottom of Boring at 16'	
	1641552 1641553 1641554 1641555	1641551 1641552 92 1641553 1641554 75 1641555	1641551 1641552 92 1641553 1641554 75 1641556 1641556	Top 2": Organic debris and roots; Middle 34": Dark yellowish brown, fine to very fine SAND with Silt, little fibric organic matter, dry to slightly moist, loose, topsoil; Bottom 4": Pale brown, fine SAND, slightly moist, trace fibric organic matter, loose Top 10": Light yellowish brown to brown, fine SAND grading to fine to very fine SAND, moist, loose; Next 5": Grey, SILT with fine to very fine Sand, wet, dense; Next 5": Brown, fine to very fine SAND, trace Silt, wet, loose; Bottom 24": Brown, fine(+) to medium SAND, wet, loose Brown to yellowish brown, fine to medium SAND, trace coarse Sand, trace Silt, wet, loose, 5" layer medium to coarse Sand, trace fine Gravel from 22-28" Top 18": Yellowish brown, fine(+) to coarse SAND (top 6") grading to fine SAND, wet, loose; Bottom 14": Grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved

VPSA Outside Drum Storage and Quonset H Start Date **Boring ID** LEA Comm No: 68V70 Client: Pratt & Whitney 09/03/97 68V7092 **End Date** SK-SB-252 Location: East Hartford, CT 09/03/97 Drilling Contractor: Drilling Method: Sampling Method: Logged By: J. Trzaski
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation: LEA Geoprobe Macro Core Groundwater Observations: Depth: Hours Northing:

Depth:		At:	Hours	Easting:		
	Sample Information			Sample Description		
Elevation/ Depth	Sample No.	Recovery (X)	Blows 76"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
10	1641558 1641559	92		Top 22": Dark yellowish brown, fine to very fine SAND with Silt, little fibric organic matter, slightly moist to wet (from 14-22") loose; Next 10": Strong brown to brown, fine SAND, some Silt, dry, dense; Bottom 12": Pale brown to yellowish brown, fine(+) to medium SAND, slightly moist, loose	0.8	
+4	1641560 1641561	88		Top 10": Yellowish brown, fine SAND grading to fine to very fine SAND, trace Silt, moist, loose; Next 5": Grey, SILT, some fine to very fine Sand, wet, dense; Next 12": Brown, fine SAND, moist, loose; Next 3": Reddish brown, very fine SAND, trace Silt, wet, loose; Bottom 12": Reddish grey, fine to medium SAND trace coarse Sand, wet, loose	1.7 5.6	
+8	1641562	62		Yellowish brown (15") to olive grey (bottom 15"), fine to medium SAND, trace fine Gravel, wet, trace coarse Sand, loose	5.7	
<u> </u>	1641563				19.1	
12	1641564	67		Top 18": Yellowish brown, fine to coarse SAND, wet, loose; Bottom 14": Grey, CLAY, trace brown fine to very fine Sand and Silt, wet, dense, varved	8.3	
‡	1641565				6.2	
+16				Bottom of Boring at 16'		
† †	-					
-20						
†						
24						
Comments	:	_1		La restra de la compania de la comp		

GEOLOG	GIC BOR	RING L	OG	Page 1 o	of 1
LEÀ Comi	VPSA Outs in No: 68 ratt & Whit East Hart	1V7092 tney	n Storage	End Date 09/10/97 SK-SI	ng ID B-254
Drilling Co Drilling M Sampling I Groundwa Depth: Depth:	ethod: G Method: ter Observa	LEA Seoprobe Macro C stions: At:	Heurs Ho	Logged By: J. Trzaski Drilling Foreman: D. Briss Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:	son
Elevation/ Depth	Sample No.	Recovery	Blows /6"	Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641581 1641582	100		Top 24": Dark yellowish-brown to yellowish-brown, fine very fine SAND, little Silt, trace fibric organic matter, slightly moist to wet (bottom 4"), loose; Next 18": Dark-brown and black-stained SILT and fine to very fine SAND, little fibric and hemic organic matter, wet, moderately dense; Bottom 6": Light yellowish-brown, fir SAND, trace medium Sand, moist, loose	0.0
1 1 1 1 1 1 1 1 1 1	1641583 1641584	75 75		Top 5": Yellowish-brown, fine to very fine SAND, wet, loose, Next 6": Grey SILT and fine to very fine SAND, wetherse; Next 4": Same as top 5"; Bottom 21": Light yellowish-brown to reddish-grey, fine to medium SAND, wet, loose	
+8	1641585	83	- · · ·	Top 16": Yellowish-brown, fine to medium SAND, wet, loose; Bottom 24": Olive-grey, fine(+) to coarse SAND,	

155.0 1641586 83 12 Top 16": Yellowish-brown, fine to coarse SAND, wet, loose; Bottom 12": Olive-grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved 1641587 58 3.0 1641588 58 2.0 16 Bottom of Boring 16' 20

trace(-) fine Gravel, wet, loose

Comments:

Boring

7

Printed On: 2/13/1998

Project: VPSA LEA Comm No: VPSA Outside Drum Storage and Quonset 1 68V7092 Client: Pratt & Whitney Location: East Hartford, CT Drilling Contractor: Drilling Method: Sampling Method: LEA Geoprobe Macro Core **Groundwater Observations:** Depth:

Start Date 09/08/97 **End Date** 09/08/97

Boring ID

SK-SB-255

Logged By: J. Trzaski Drilling Foreman: D. Bris Drill Rig: Geoprobe 5400 Surface Elevation: D. Brisson

Northing:

Depth:	At: Hours			Easting:		
	Sample Information			Sample Description		
Elevation/ Depth	Sample No.	Recovery (な)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm	
10	1641589 1641590	100		Top 36": Dark yellowish and black-stained, SILT and fine to very fine SAND, fibric organic matter at 0-8" and 28-36", hemic and sapic organic matter at 28-36", slightly moist to moist, loose to dense; Bottom 12": Light yellowish-brown, fine SAND, trace medium Sand, moist, loose	6.0	
+4	1641591 1641592	75 75		Top 3": Reddish-brown, fine(+) to very fine SAND, moist, loose; Next 6": Grey, SILT with fine to very fine SAND, wet, dense, orange Mottles; Next 27": Yellowish-brown to reddish- grey, fine SAND grading to fine to medium Sand, moist to wet, loose	2.0	
8	1641593	58		Greyish-brown, fine to medium SAND, trace corse Sand, trace Silt, wet, loose	6.0	
Ŧ Ŧ	1641594	58			35.0	
1 12						
+ + + + + + + + + + + + + + + + + + + +	1641595 1641596	88		Top 26": Olive-grey to yellowish-brown, fine to medium SAND, trace(+) coarse Sand, wet, loose; Bottom 16": Olive-grey, CLAY, trace brown, fine to medium Sand and Silt, wet, dense, varved	1.0	
- 20				Bottom of Boring 16'		
]	1			1	

Printed On: 2/13/1998

Project: VPSA LEA Comm No: VPSA Outside Drum Storage and Quonset H 68V7092

Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: Drilling Method: Sampling Method: Geoprobe Macro Core

Groundwater Observations: Depth:

Start Date 09/08/97 End Date 09/08/97

Boring ID

SK-SB-256

Logged By: J. Trzaski
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400 D. Brisson

Surface Elevation:

Northing:

Depth:	At: Hours						
<u> </u>	San	npie Inform	ation	Sample Description			
Elevation/ Depth	Sample No.	Recovery (光)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)		
† 0 † †	1641597 1641598	79		Top 14": Dark yellowish-brown, fine to very fine SAND with Silt, trace fibric organic matter, slightly moist, loose; Next 10": Brown, fine(+) to medium SAND moist to wet, loose, 1" Asphalt piece at 3"; Next 6": Dark brown and black-stained, SILT, some fine to very fine SAND, fibric and supric organic matter, wet, moderately denst; Bottom 8": Olive-grey, fine to very fine SAND, trace Silt, wet, loose	100		
4	1641599 1641600	50 50		Top 2": Grey, SILT and fine to very fine SAND, wet, modertely dense; Next 8": Brown, fine(+) to very fine SAND, moist, loose; Bottom 14": Yellowish-brown to reddish-grey, fine to medium SAND, wet, loose	0.0		
8	1641601	50		Brown, fine(+) to medium SAND, trace coarse Sand, generally fining downward, wet, loose	2.0		
Ţ	1641602	50			2.0		
+12 + + + + + + +	1641603 1641604	60		Top 6": Yellowish-brown, fine to coarse SAND, wet, loose; Next 5": Brown, fine SAND, trace medium Sand, wet, loose; Next6": Same as top 6"; Bottom 12": Grey CLAY, trace brown, very fine Sand and Silt, wet, moderately dense, varved	0.0		
20				Bottom of Boring 16'			
Comments	<u> </u>						

Project: VPSA Outside Drum Storage and Quonset H
LEA Comm No: 68V7092
Client: Pratt & Whitney
Location: East Hartford, CT

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Start Date 09/09/97 End Date 09/09/97

Boring ID SK-SB-257

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:

Northing: Easting:

рерш:		XL:	110013	# Easting:		
	Sample Information			Sample Description		
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6°	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
	1641609 1641610	83		Brown to yellowish-brown, fine SAND, little Silt, trace coarse Gravel, trace medium Sand, fibric organic matter @ top 10", dry to moist, loose; 2": Layer dark brown, SILT with fine to very fine Sand, fibric and sapric organic matter, wet, loose at 28-30"	0	
+4	1641611	58		Yellowish-brown to pale brown, fine to medium SAND, wet, loose, trace Silt	0.5	
†	1641612	58			1.0	
8	1641613	62		Brown to light olive-brown, fine to medium SAND, trace coarse Sand, wet, loose	3.5	
† †	1641614 1641615	62 62			2.0	
12	1641616	58		Top 16": Yellowish-brown, fine(+) to coarse SAND, wet, loose; Bottom 12": Grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved	0.5	
} † †	1641617	58		Title Salid dila Sitt, Wot, delise, Valved	0.5	
16				Bottom of Boring 16'		
20						
+24			,			
Comments						

Boring

Project: VPSA Outside Drum Storage and Quonset H **Start Date** Boring ID LEA Comm No: 68V7092 09/09/97 Client: Pratt & Whitney End Date SK-SB-258 Location: East Hartford, CT 09/09/97 Logged By: J. Trzaski
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation: LEA **Drilling Contractor:** Drilling Method: Sampling Method: D. Brisson Geoprobe Macro Core **Groundwater Observations:** Depth: Northing:

Depth:		Ali At:	Hours	Easting:	İ
	Sar	mple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641618 1641619	100		Top 14": Dark yellowish-brown, fine SAND, some Silt, fibric organic matter, slightly moist, loose; Next 30": Dark brown, SILT with fine to very fine Sand, fibric organic matter throughout, sapric organic matter at bottom 12", slightly moist to wet, loose; Bottom 4": Grey, fine to very fine SAND and SILT, moist, orange Mottles, dense	50.0
+4	1641620 1641621	75 75		Top 5": Same as last 4"; Bottom 31": Greyish-brown, fine to very fine SAND, trace Silt, grading to reddish-grey, fine to medium SAND, moist to wet, loose	1.0
8	1641622	83		Top 30": Brown, fine(+) to medium SAND, trace(-) coarse Sand, wet, loose; Bottom 10": Yellowish-brown, fine to coarse SAND, wet, loose	1.0
+ 12	1641623	83		Top 20": Yellowish-brown, fine(+) to medium SAND, wet,	0
† † † †	1641624	83		loose; Middle 6": Yellowish-brown, medium to fine SAND, trace coarse Sand, wet, loose; Bottom 14": Grey, CLAY, trace brown, fine to very fine SAND, Silt, wet, dense, varved	0
16				Bottom of Boring 16'	
+20 +				·	
Comments	:				

At:

Depth:

Northing:

Project: VPSA Outside Drum Storage and Quonset H tart Date **Boring ID** LEA Comm No: 68V70 Client: Pratt & Whitney 09/09/97 End Date 68V7092 SK-SB-259 Location: East Hartford, CT 09/09/97 LEA . Logged By: J. Tr. Drilling Foreman: **Drilling Contractor:** J. Trzaski Drilling Method: Geoprobe D. Brisson Sampling Method: Macr Groundwater Observations: Drill Rig: Geoprobe 5400 Surface Elevation: Macro Core

Depth:		AU: At:	Hours Hours	Northing: Easting:	
	Sam	aple Informat	ion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1641626 1841627	83		Top 30": Yellowish-brown, fine SAND, little Silt, trace medium Sand, fibric organic matter at top 8", slightly moist to moist, loose; Next 2": Dark brown, SILT with fine to very fine Sand, fibric and sapric organic matter, moist, loose; Bottom 4": Grey, SILT and fine to very fine SAND, moist, dense, orange Mottles	1.5
+++++++++++++++++++++++++++++++++++++++	1641628 1641629	71		Brown, fine(+) to very fine SAND, trace Silt, grading to yellowish-brown, fine to medium SAND, moist to wet, loose, wet at 10"	1.0
+8 +	1641630	83		Yellowish-brown, fine to medium SAND, trace(+) coarse Sand, wet, loose	1.0
† † †	1641631	83			1.0
12	1641632	75		Top 14": Yellowish-brown, fine to coarse SAND, wet, loose; Bottom 22": Olive-grey, CLAY, trace fine to very fine SAND and SILT, wet, moderately dense, varved	0.5
† † †	1641633	75			0.5
+16 + + + + +	٠			Bottom of Boring 16'	
20					:
+24					

GEOLOGIC BURING LOG	Page 1	of 1
Project: VPSA Outside Drum Storage and Quonset H LEA Comm No: 68V7092	Start Date 09/09/97 Box	ring ID
Client: Pratt & Whitney Location: East Hartford, CT	YELL J Dodg	SB-260
Drilling Contractor: LEA Drilling Method: Geoprobe Sampling Method: Macro Core Groundwater Observations: Depth: At: Hour	Logged By: J. Trzaski Drilling Foreman: D. Br Drill Rig: Geoprobe 5400 Surface Elevation: Northing:	

Depth:	2	\t:	Hours	Easting:	
	San	ple Informat	ion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641634 1641635	92		Top 2": Black bituminous Asphalt; Next 6": Red, fine to coarse SAND, trace fine Gravel, trace Silt, dry, loose; Next 28": Dark brown, SILT and fine to very fine SAND, fibric and sapric organic matter, moist to wet, loose, wet at 12"; Next 4": Grey, SILT and fine to very fine SAND, moist, dense; Bottom 4": Olive, fine to very fine SAND, moist, loose	200
7	1641636 1641637	83		Top 14": Pale-brown, fine to very fine SAND, little Silt, moist, loose; Middle 10": Grey, SILT, wet, loose; Bottom 16": Brown, fine SAND, grading to reddish-grey, fine to medium Sand, wet, loose	20.0
8	1641638	79		Top 34": Yellowish-brown, fine to medium SAND, trace(+) coarse Sand, wet, loose; Bottom 4": Yellowish-brown, fine SAND, wet, loose	1.5
‡	1641639	79			1.0
12	1641640	88		Top 22": Brown, fine to very fine SAND, wet, loose; Next 20": Grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved	1.0
† †	1641641	88			1.0
+ 16 + + + + +	-			Bottom of Boring 16'	
20					
24					
т	1	1 1			1

3K-SB-260

VPSA Outside Drum Storage and Quonset L Project: Start Date Boring ID 68V7092 LEA Comm No: 09/09/97 Client: Pratt & Whitney **End Date** SK-SB-261 East Hartford, CT Location: 09/09/97 LEA **Drilling Contractor:** Logged By: J. Trzaski **Drilling Method:** Geoprobe Drilling Foreman: D. Brisson Sampling Method: Macro Core Drill Rig: Geoprobe 5400 **Groundwater Observations:** Surface Elevation: Hoth Depth: At: Northing: Depth: At: Hour Easting: Sample Description Sample Information Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Blows Sample No. Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1641642 83 Top 6": Reddish-brown, fine to coarse SAND, little fine 30 Gravel, trace Silt, dry, loose; Next 6": Yellowish-brown, fine SAND, little Silt, tree medium Sand, wet, loose; Next 26": Dark brown, SILT with fine to very fine Sand, fibric 1641643 83 >1000 and sapric organic matter, wet, loose; Bottom 2": Grey, SILT and fine to very fine SAND, moist, dense 1641644 88 Top 12": Grey, SILT, some fine to very fine Sand, loose to dense, wet; Next 20": Brown, fine(+) to very fine SAND, 100.0 moist to wet, loose; Bottom 10": Brown, fine to medium SAND, wet, loose, trace coarse Sand 1641645 88 5.0 1641646 71 1.0 Brown to yellowish-brown, fine to medium SAND, little(-) coarse Sand, wet, loose 1641647 71 1.0 12 1641648 71 1.0 Top 6": Yellowish-brown, fine to coarse SAND, wet, trace fine Gravel, loose; Next 6": Same as top 6"; Bottom 2": Grey, CLAY, trace fine to very fine Sand, Silt, wet, moderately dense, varved 1641649 71 1.5 Printed On: 2/13/1998 16 Bottom of Boring 16' 20 24 Comments:

Groundwater Observations:

Depth:

Project: VPSA Outside Drum Storage and Quonset LEA Comm No: 68V7092 Client: Pratt & Whitney Location: East Hartford, CT Drilling Contractor: Drilling Method: LEA Geoprobe Sampling Method: Macro Core

Start Date 09/10/97 End Date 09/10/97

Boring ID SK-SB-262

Logged By: J. Trzaski Drilling Foreman: D. Bris Drill Rig: Geoprobe 5400 Surface Elevation: D. Brisson

Northing:

Depth:	At: Hours			Easting:		
	San	nple Inform	ation	Sample Description		
Elevation/ Depth	Sample No.	Recovery (な)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
10	1641657	96		Top 26": Dark yellowish-brown, fine to very fine SAND, some Silt, trace medium Sand, fibric organic matter in top 6", slightly moist to wet (wet bottom 3"), loose; Next 8": Dark brown, SILT, fibric and sapric organic matter, wet, loose; Next 5": Olive-brown, fine SAND, some Silt; Bottom 7": Pale- brown, fine SAND, moist, loose	0	
†4 † †	1641659 1641660	75 76		Top 6": Same as last 7", trace SILT, wet; Next 8": Brown, fine to very fine SAND, trace Silt, wet, loose; Next 6": Grey, SILT, wet, loose; Bottom 16": Brown, fine(+) to medium SAND, wet, loose, septic odor	0	
+8	1641661	83		Top 35": Brown to yellowish-brown, fine to medium SAND, trace(+) coarse Sand, trace Silt, wet, loose; Bottom 5": Yellowish-brown, fine to coarse SAND, trace fine Gravel,	0	
‡	1641682	83		wet, loose	0	
+12	1641663	83		Top 22": Same as last 5", little fine Gravel; Bottom 18": Olive-grey, CLAY, trace brown, fine to very fine SAND and SILT, wet, dense, varved	0	
† † †	1641664	. 83			0	
-16 	-			Bottom ob Boring 16'		
+ + + 24						
Comment	s:	•				

Project: VPSA Outside Drum Storage and Quonset H LEA Comm No: 68V7092 Start Date **Boring ID** 09/10/97 End Date Client: Pratt & Whitney SK-SB-263 Location: East Hartford, CT 09/10/97 Logged By: J. To Drilling Foreman: Drilling Contractor: Drilling Method: LEA J. Trzaski Geoprobe D. Brisson Sampling Method: Macro Core Drill Rig: Geoprobe 5400 Surface Elevation: Groundwater Observations: Depth: At: Northing: Depth: At: Easting:

Depen.	Sam	ple Informs	ation	Sample Description	
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
-	1641666 1641667	88		Top 22": Yellowish-brown, SILT with fine to very fine Sand, trace fibric organic matter, dry, loose; Next1": Dark brown, SILT, fibric and sapric organic matter, moist, loose; Bottom 19": Light yellowish-brown, fine to very fine SAND and SILT, coarsening downward to yellowish-brown, fine SAND, slightly moist, loose	1.0
+4 + + + + + + +	1641668 1641669	83		Top 8": Grey, SILT, trace fine to very fine SAND, moist, dense; Next 22": Brown, fine to very fine SAND, trace Silt, trace medium Sand, moist to wet, loose, wet at 14"; Bottom 10": Brown, fine to medium SAND, wet, loose, occasional iron-staining	1.0
+8	1641670 1641571	71		Yellowish-brown, fine to medium SAND, little(-) coarse Sand, trace Silt, wet, loose, generally coarsening downward	2.0
+12 +	1641572 1641573	92	. 1	Top 10": Yellowish-brown, medium to fine SAND, little(-) coarse Sand, wet, loose; Middle 20": Brown, fine SAND, trace medium Sand, trace Silt, wet, loose; Bottom 14": Grey, CLAY, trace fine to very fine Sand and Silt, wet, dense, varved	1.0
-16	-		·	Bottom of Boring 16'	
-24 Comments					

Printed On: 2/13/1998

Depth:	I	At:	Höurs Hour	Northing: Easting:	
	San	nple Informati	on	Sample Description	
Slevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm
	1641674	83	·	Top 2": Organic debris; Next 10": Reddish-brown, fine to coarse SAND, little fine Gravel, trace coarse Gravel, trace Silt, dry, loose; Next 18": Yellowish-brown, SILT with fine to very fine Sand, trace fibric organic matter, slightly moist, medium dense to loose; Bottom 10": Light yellowish-brown, fine SAND, trace medium Sand, slightly moist, loose, slight petroleum(?) odor	40.0
† †	1641676	58		Top 12": Same as last 10", slightly moist to wet at bottom, loose, orange iron-staining at 10-12"; Next 5": Grey, SILT, little fine to very fine SAND, wet, dense, orange Mottles; Next 5": Grey, fine to very fine SAND, trace Silt, wet, loose; Bottom 6": Greyish-brown, fine to medium SAND, wet, loose	0
+8	1641678	79		Brown, fine(+) to medium SAND, trace coarse Sand, trace Silt, grading to medium to fine Sand, little coarse Sand, trace Silt, wet, loose	1.0
‡	1641679	79			0
12	1641680	75		Top 16": Dark yellowish-brown, fine(+) to coarse SAND, trace fine Gravel, trace Silt, wet, loose; Next 10": Dark yellowish-brown, fine(+) to medium Sand, trace coarse Sand, trace Silt, wet, loose; Bottom 10": Olive-grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved	1.0
16		-		Bottom of Boring 16'	
† † +	_				
-20			!		
-24					
t					<u> </u>

Boring

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Printed On: 2/13/1998

Groundwater Observations:

At:

Depth:

Project: VPSA Outside Drum Storage and Quonset H
LEA Comm No: 68V7092
Client: Pratt & Whitney
Location: East Hartford, CT

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core

 Start Date
 Boring ID

 09/10/97
 SK-SB-265

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:

Northing: Easting:

Depth: Depth:		At: At:	Hours	Fasting:	
	San	nple Inform	ation	Sample Description	J
Elevation/ Depth	Sample No.	Recovery (な)	Blows 76"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	{ppm}
10	1641682 1641683	42		Top 2": Organic debris; Bottom 18": Dark yellowish-brown, SILT with fine to very fine Sand, trace fibric organic matter, dry to slightly moist, loose	0
+4	1641684	58		Top 20": Pale brown to brown, fine to very fine SAND, little Silt, moist to wet, loose, wet at 8"; Bottom 8": Greyish-brown, fine(+) to medium SAND, wet, loose	2.0
+	1641684	58			0
+ + +	1641685	62		Brown to yellowish-brown, fine to medium SAND, little(-) coarse Sand, wet, loose, metal wire in sample tube	1.0
† †	1641686	75			0
12	1641687	75		Top 26": Yellowish-brown, fine to medium SAND, little(-) coarse Sand, trace Silt, wet, loose; Bottom 10": Olive-grey,	0
‡	1641688	75		CLAY, trace brown, fine to very gine Sand and Silt, wet, dense, varved	0
16		 		Bottom of Boring 16'	
‡	_				
20					
† † † 24					
1 24					
Comments	L \$:		L.,	L	

Start Date Project: VPSA Outside Drum Storage and Quonset Boring ID LEA Comm No: 68V7092 Client: Pratt & Whitney 09/12/97 **End Date** SK-SB-266 Location: East Hartford, CT 09/12/97 Logged By: J. Trzaski
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation: Drilling Contractor: Drilling Method: Geoprobe D. Brisson Sampling Method: Macro Core Groundwater Observations: Depth: At: Northing: Easting:

Depth:	1	At:	Hod	\(\frac{1}{2}\)	
	San	nple Inform	ation	Sample Description	
Elevation/ Depth	Sample No.	Recovery (2)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641696 1641697	96		Top 2": Black bituminous asphalt; Next 6": Olive grey, fine to coarse SANd, some fine Gravel, trace coarse Gravel, trace Silt, slightly moist, loose; Next 16": Dark brown, SILT, trace fine to very fine Sand, fibric and sapric organic matter, slightly moist, loose; Bottom 22": Strong brown, fine to very fine SAND, with Silt, grading to fine SAND, trace medium Sand, slightly moist to moist, loose	0
+	1641698 1641699	62		Top 3": Same as above, last 22": Middle 5": Grey, SILT, little fine to very fine Sand, wet, dense, orange mottles; Bottom 22": Brown, fine to very fine SAND, trace Silt, grading to fine to medium SAND, wet, loose	2.0
8	1641700	67		Brown to yellowish brown, fine(+) to medium SAND, trace coarse Sand, trace Silt, wet, loose	4.0
<u> </u>	1641701 1641702				10.0
- 12	1641703	62		Yellowish brown, fine to coarse SAND, trace Silt, wet, loose, Clay in tip (not sampled)	20.0
1	1641704				1.0
+16				Bottom of Boring at 16'	<u> </u>
	-				
20					
24					
Comments	:	_1			

No: SK-SB-267

Start Date VPSA Outside Drum Storage and Quonse Project: **Boring ID** LEA Comm No: 68V7092 09/12/97 Client: Pratt & Whitney **End Date** SK-SB-267 Location: East Hartford, CT 09/12/97 Logged By: J. T Drilling Foreman: **Drilling Contractor:** J. Trzaski D. Brisson **Drilling Method:** Geoprobe Sampling Method: Macro Core Drill Rig: Geoprobe 5400 **Groundwater Observations:** Surface Elevation: Hours Northing: Depth: At: Depth: At: Hours **Easting:** Sample Description Sample Information Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Sample No. Blows Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1641705 83 0.6 Top 3": Black bituminous asphalt; Next 6": Reddish brown, fine to coarse SAND, little Gravel, trace coarse Gravel, trace Silt, dry, loose; Next 20": Dark brown, fine to very fine SAND, little Silt, trace medium Sand, trace fibric 1641706 300.0 and sapric organic matter at bottom 10", slightly moist to moist, loose; Next 4": olive grey, SILT, with fine to very fine Sand, moist, loose; Bottom 7": Brown, fine SAND, trace 71 Silt, moist, loose 480.0 1641707 Top 5": Grey, SILT, trace fine to very fine Sand, moist, moderately dense; Next 10": Brown, fine to very fine SAND, little Silt, moist, loose; Bottomn 19": Reddish grey, fine 1641708 600.0 to medium SAND, trace coarse Sand, trace Silt, wet, loose 8 1641709 62 350.0 Top 18": Greyish brown, medium to fine SAND, trace coarse Sand, trace Silt, wet, loose; Bottom 12": Yellowish brown, fine to very fine SAND, trace Silt, wet, loose 200.0 1641710 12 1641711 88 2.0 Top 10": Same as above, last 12": Next 6": Dark yellowish brown, fine to coarse SAND, trace Silt, trace fine Gravel, wet, loose; Bottom 26": Olive grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved 1.0 1641712 Printed <u>:</u> 16 Bottom of Boring at 16' 2/13/1998 20 24 Boring Comments:

VPSA Outside Drum Storage and Quonset H Project: tart Date **Boring ID** V12/97 LEA Comm No: 68V7092 End Date Client: Pratt & Whitney SK-SB-268 Location: East Hartford, CT 09/12/97 **Drilling Contractor:** LEA Logged By: J. Trzaski Drilling Foreman: **Drilling Method:** Geoprobe D. Brisson Sampling Method: Drill Rig: Macro Core Geoprobe 5400 **Groundwater Observations:** Surface Elevation: Depth: At: Hours Northing: Depth: At: Hours Easting: Sample Information Sample Description Elevation/ Depth Color, Primary Grain Size, Secondary Grain Sizes, Blows Sample No. Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1641713 100 25.0 Top 3": Organic debris; Next 6": Dark yellowish brown, SILT, with fine to very fine Sand, trace fibric organic matter, moist, loose; Next 4": Dark brown and blackstained, SILT, fibric and sapric organic matter, wet, loose; Next 12": Strong brown, SILT, trace fine to very fine Sand, 1641714 3.0 little fibric organic matter, moist, loose; Bottom 23": Brown, SILT, with fine to very fine Sand, grading to light 1641715 67 yellowish brown, fine SAND, trace medium Sand, moist, 6.0 Voose Top 2": Reddish brown, very fine SAND, wet, loose; Next 4": Grey, SILT, trace fine to very fine Sand, wet, moderately 1641716 6.0 dense; Next 18": Brown, fine SAND, trace Silt, wet, loose; Bottom 8": Reddish grey, fine to medium SAND, trace Silt, 8 1641717 79 15.0 Top 8": Brown, medium to fine SAND, trace coarse Sand, trace Silt, wet, loose; Next 14": Brown, fine to very fine SAND, trace Silt, wet, loose; Next 10": Same as top 8"; Bottom 6": Same as second 14" 1641718 5.0 12 1641719 75 3.2 Top 16": Yellowish brown, fine to coarse SAND, trace Silt, wet, loose; Bottom 20": Olive grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved Printed 1641720 1.0 On: 2/13/1998 16 20 Boring Comments: ×

Facility Name:	: PRATT & WHITNEY - MAIN STREET
Facility ID#: _	CTD990672081
Phase Classific	cation: R-55
Purpose of Ta	rget Sheet:
[X] Oversize	ed (in Site File) [] Oversized (in Map Drawer)
[] Page(s)	Missing (Please Specify Below)
[] Privilego	ed [] Other (Provide Purpose Below)
DRAWING T	Oversized Material, if applicable: SM5-1: SOIL INVESTIGATIONS, T PORTION, SOIL SAMPLING LOCATION

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Facility Name: PRATT & WHITE Facility ID#: CTD990672081	rney - main street
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Diana Classiff and D. F.	
Phase Classification: R-5	
Purpose of Target Sheet:	
[X] Oversized (in Site File)	Oversized (in Map Drawer)
[] Page(s) Missing (Please Spe	ecify Below)
[] Privileged [Other (Provide Purpose Below)
Description of Oversized Materi DRAWING TM5-2: SOIL INVINORTHEAST PORTION, SOIL MAP	ESTIGATIONS,
[X] Map [] Photograph	[] Other (Specify Below)

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Facility ID#: <u>CTD990672</u>	2081
Phase Classification: <u>R-5</u>	
Purpose of Target Sheet:	
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MAP	

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[] Oversized (in Map Drawer) Specify Below)
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Specify Below)
[] Other (Provide
Purpose Below)
erial, if applicable: VESTIGATIONS, IL SAMPLING LOCATION Oh [] Other (Specify)
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